

PSYCHOLOGICAL ABSTRACTS

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GENERAL (incl. Statistics)

4474. Allers, R. *The vis cogitiva and evaluation.* *New Scholast.*, 1941, 15, 195-221.—According to St. Thomas there is, even in animals, a capacity of apprehending certain data not immediately given by the external senses. Sheep are aware of the dangerousness of the wolf. What they sense is merely a shape, a size, a color, the sound of a howl, etc. The faculty enabling animals to become cognizant of favorable and unfavorable environmental situations St. Thomas calls the *vis aestimativa*. It corresponds to the afferent part of instinct. It comes close to reason. In man, it is called the *vis cogitiva* or *ratio particularis*. Its object is the particular end or good. Experimental psychologists have largely neglected the study of value appreciation. Declaring values to be merely subjective has no explanatory worth. Values are experienced not less than other qualities. Explanations of value in terms of pleasure are contrary to experienced fact. Cooperation between present philosophy and present experimental psychology will be needed to clarify some of the problems of the mind.—M. F. Martin (Northampton State Hospital).
4475. [Anon.] Arthur S. Otis. *J. consult. Psychol.*, 1941, 5, 205.—Portrait.
4476. [Anon.] Quantitative methods in psychology. *Nature, Lond.*, 1938, 141, 613.—This is an account of a meeting of the Royal Society to discuss the application of quantitative methods to certain problems in psychology. The 3 problems discussed were statistical methods, industrial accidents and sickness, and industrial selection. Included are brief remarks by Myers, Spearman, Thomson, Burt, Greenwood, Marquis, Stanbridge, et al.—N. R. Bartlett (Brown).
4477. Ayd, J. J. *An introductory manual in psychology.* New York: Fordham Univ. Press, 1941. Pp. x + 161. \$1.50.—In his foreword the author states that the whole field of normal and abnormal psychology is covered "as briefly as is consistent with clarity and completeness" and that the presentation is a useful merger of the empirical, the Scholastic rational, the abnormal, and the sociological elements in psychology. The development of the book is posited upon the following definition: "[Psychology] concerns itself with the human soul and its conscious processes, in the normal and in the abnormal individual." A numerical list of references cited is given as a bibliography.—M. H. Erickson (Eloise Hospital).
4478. Bartlett, M. S. *Methods of estimating mental factors.* *Nature, Lond.*, 1938, 141, 609-610.—This is a note in reference to Thomson's criticism (see XV: 4509). The author admits that Thomson's equation and his own are equivalent as vector statistics, but points out the different interpretations and properties of the two.—N. R. Bartlett (Brown).
4479. B[entley], M. *The 'best' psychologists.* *Amer. J. Psychol.*, 1941, 54, 439.—This is a complaint by a former president of the American Psychological Association who has been asked to name the 6 living psychologists in the U. S. who are "the best" or "the most outstanding." The difficulties involved in making such a judgment are given.—D. E. Johannsen (Skidmore).
4480. Carlson, W. S. *Demonstrational uses of small projectors.* *Amer. J. Psychol.*, 1941, 54, 423.—Technique for demonstrating apparent movement, yellow fusion color, simple flicker frequency, color-blindness, etc.—D. E. Johannsen (Skidmore).
4481. Croxton, F. E. *Workbook in applied general statistics.* (Rev. ed.) New York: Prentice-Hall, 1941. \$2.10.—See XI: 5395.
4482. D[allenbach], K. M. *Psychology in junior colleges.* *Amer. J. Psychol.*, 1941, 54, 436-437.—This is a report of a committee established by the American Association of Junior Colleges "to make an intensive study of the teaching of psychology in the 625 junior colleges in the country."—D. E. Johannsen (Skidmore).
4483. D[allenbach], K. M. *Frederick Kuhlmann: 1876-1941.* *Amer. J. Psychol.*, 1941, 54, 446-447.—Obituary.—D. E. Johannsen (Skidmore).
4484. Ducasse, C. J. *Some observations concerning the nature of probability.* *J. Phil.*, 1941, 38, 393-403.—The maximum degree of probability is necessity, not certainty; for certainty, there must be known truth in the premises as well as 100% probability on the premises. Although it is usually asserted that propositions are universal or particular, it is shown that "there are as many possible propositional 'quantities' as there are percentages." In view of these demonstrations, demonstrative inference differs from problematic inference only in degree. "Therefore," in introducing a conclusion, does not mean "necessarily" but rather "on the foregoing premises. . . ." Inclination to believe, it is indicated, may be quantified. The premises and conclusions of inferences are opinions, which in turn are propositions together with some degree of inclination or disinclination to believe them. The degree of inclination to believe such propositions determines in part the validity of inferences. "Probability" is a modalizer, basically, of assertion and only derivatively and elliptically of inference. Knowledge of the validity of inferences comes before

the discovery of the rules of their validity (the author discusses how this occurs). There are also discussed the topics of necessary propositions, chance vs. probability, and the conclusion of a probability-inference can be separated from the premises.—*C. N. Cofer* (George Washington).

4485. Eisenhart, C., & Swed, F. S. On certain criteria for testing the homogeneity of k estimates of variance. *Ann. math. Statist.*, 1940, 11, 111.—Abstract.

4486. Flanagan, J. C. Statistical methods related to test construction and evaluation. *Rev. educ. Res.*, 1941, 11, 109-130.—This is a review of the literature from January, 1938 to July, 1940. Topical headings are as follows: bibliographies, textbooks, and general discussions; factor theory: summaries and points of view; factor analysis: technical developments; analysis of variance; tests of significance; correlation formulas and computational methods; basic statistical tables and calculation devices; studies of types of tests and test items; item analysis; units, scales, and scaling methods; problems of weighting; reliability coefficients; accuracy of measurement; validity and interpretation of scores; problems of administering and scoring tests. There are 192 titles in the bibliography.—*M. Keller* (Butler Hospital).

4487. Garnett, M. Topological psychology and neurographics. *Brit. J. Psychol.*, 1941, 32, 15-29.—The resemblance of the concepts described by Lewin in his topological psychology to those of neurographics used by the author in his book *Education and world citizenship* is shown.—*M. D. Vernon* (Cambridge).

4488. Gehlen, A. *Der Mensch. Seine Natur und seine Stellung in der Welt.* (Man. His nature and position in the world.) Berlin: Junker & Dünhaupt, 1940. Pp. 471. RM 14.—[Abstracted review; original not seen.] Gehlen's thesis is that man is an as yet unstabilized creature and that, in comparison with the animals, he is exceedingly poorly adapted. Actually, human biology is not comparative but is the problem of how such a strange unadapted being continues to exist by compensating for his deficiencies with his ability to act and to work. The first section of the book takes up recent anatomical and embryological studies on man's special position. The second is devoted to a pragmatic theory of perception and movement, speech, play and phantasy, and the problems of truth and knowledge. The third section includes the drives and their laws (inhibition, displacements, etc.) and character, religions, and philosophies, as the highest guiding systems of action.—*M. E. Morse* (Baltimore, Md.).

4489. Helson, H. The twelfth annual meeting of the Eastern Psychological Association. *Amer. J. Psychol.*, 1941, 54, 441-443.—Summary of activities of meetings held April 18-19, 1941, at Brooklyn College.—*D. E. Johannsen* (Skidmore).

4490. Hitschmann, E. Freud in life and death. *Amer. Imago*, 1941, 2, 127-133.—This is a tribute to

Freud and a brief report of some of his character traits. The neoplasm which led to his death is attributed to "the injury on or near the lower jaw in early youth, the inveterate smoking, which the doctors blamed as the original cause of the neoplasm, the tendencies for self-punishment for envy, an oral character trait." One of Freud's own dreams contributes material to this interpretation.—*W. A. Varvel* (Texas A. & M.).

4491. Kilpatrick, W. H. *Selfhood and civilization; a study of the self-other process.* New York: Macmillan, 1941. Pp. 243. \$1.50.—This book aims to show how man, in the human sense, is a self-other compound such that within the self there is a sense of others inherently embedded. The self-other process, which is basic to the creation of language and other cultural forms, requires a favorable environment in order to realize its potentialities. It is considered as a general basic conception for psychological study; it works to bring to the growing child such human characteristics as self-conscious agency, accountability, moral responsibility, consciousness, objectivity, and standards. Selfhood, culture, and language are the 3 factors which interact to shape our civilization. The latter half of the book presents various applications of the self-other process: in psychology, in philosophy, and in education. The bearing of the compounded selfhood on freedom of action, moral accountability, security, and law and order, is developed. Applications are made to the present-day social upheaval.—*A. G. Wesman* (Columbia).

4492. Ledermann, W. A shortened method of estimation of mental factors by regression. *Nature, Lond.*, 1938, 141, 650.—This is a brief description of an extension to multiple factor analysis of a Spearman formula for the estimation of the "general factor" g in the theory of two factors.—*N. R. Bartlett* (Brown).

4493. McBride, K. E. *Henry Head: 1861-1940.* *Amer. J. Psychol.*, 1941, 54, 444-446.—Obituary.—*D. E. Johannsen* (Skidmore).

4494. Mode, E. B. *The elements of statistics.* New York: Prentice-Hall, 1941. Pp. xvi + 378. \$3.50.—This text is written for elementary students. It presupposes no mathematics beyond secondary-school algebra and geometry. Written for students of economics, sociology, biology, psychology, and education, all these fields are represented in the examples, but none is favored. Chapter headings show the topics covered: introduction devoted to the origin and meaning of statistics; computational techniques; charts, diagrams, and graphs; frequency distributions; the arithmetic, harmonic, and geometric means; the median and other positional averages; index numbers; measures of dispersion; uniform scales, moments; the frequency curve; curve fitting; correlation; binomial distribution; measures of reliability, the Chi-square test. A list of 37 references and an index are appended. The book is accompanied by separate tables (see XV: 4495).—*J. McV. Hunt* (Brown).

4495. Mode, E. B. *Prentice-Hall mathematical tables chiefly to four significant digits to accompany The elements of statistics* by E. B. Mode. New York: Prentice-Hall, 1941. Pp. 15.—(See XV: 4494.) These 11 tables include: logarithms, squares and square roots, cubes and cube roots, reciprocals, ordinates of the normal curve, area under the normal curve, amount of compound interest, factorials and their logarithms, binomial coefficients, values of Chi-square, and American experience mortality table.—*J. McV. Hunt* (Brown).

4496. Moore, I. A miniature color-mixer. *Amer. J. Psychol.*, 1941, 54, 424.—*D. E. Johannsen* (Skidmore).

4497. Mouchet, E. José María Ramos Mejía, fundador de la psicología patológica en la Argentina. (José María Ramos Mejía, founder of psychopathology in Argentina.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 559-562.—Appreciation and works.—*M. E. Morse* (Baltimore, Md.).

4498. Munn, N. L. The thirty-sixth annual meeting of the Southern Society for Philosophy and Psychology. *Amer. J. Psychol.*, 1941, 54, 439-441.—Report of papers read at the meetings held April 10-12, 1941, at Washington, D.C.—*D. E. Johannsen* (Skidmore).

4499. Myers, C. S. Sir Henry Head, 1861-1940. *Brit. J. Psychol.*, 1941, 32, 5-14.—Obituary.—*M. D. Vernon* (Cambridge).

4500. Myers, C. S. Aspects of modern psychology. *Science*, 1941, 94, 75-81; 102-105.—This is a critical and historical essay about the movements and schools of psychology and their place in the psychology of today.—*F. A. Mote, Jr.* (Connecticut).

4501. Nuñez, R. La Sociedad de Psicología de Buenos Aires; su labor cultural durante los años 1938 y 1939. (The Psychological Society of Buenos Aires; its cultural work during 1938 and 1939.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 563-599.—Résumés of a series of lectures given before the Society are presented. Among the subjects were: the schizoid temperament (Mouchet); psychopathology of suicide (Bosch); evolutionary stages of the nervous system, toward the conquest of space and time (Soler); woman as a psychological phenomenon (Székely); psychomotility, physiological discussion (Dimitri); and neuropathic anxiety, present state of the problem (Thenon).—*M. E. Morse* (Baltimore, Md.).

4502. Ruch, F. L. *Psychology and life*. (Rev. ed.) Chicago: Scott, Foresman, 1941. Pp. xii + 754. \$2.75.—This edition retains the previous emphasis on student interest, the individual, and the personal problems of the student but has increased the attention to scientific background and added material on problems arising from the war. The 2 chapters of Part I deal with the foundations of psychology. The 4 chapters of Part II discuss motivation, the nature and control of emotion, and reactions to conflict. Part III consists of 5 chapters concerned with sensory experience, attention and

perception, learning, and thinking. The 5 chapters of Part IV treat the individual as a part of society, discussing personality, intelligence, vocational and employment psychology, getting along with people, and the psychology of social problems. Physiological backgrounds are presented in the 2 chapters of Part V. (See also XI: 4430.)—*G. S. Speer* (Central YMCA College).

4503. Schlosberg, H. An inexpensive memory drum. *J. exp. Psychol.*, 1941, 29, 161-163.—An electrically controlled device, costing only \$5.—, is suggested as a suitable means for presenting memory lists of two dozen items. It comprises a 3½ inch diam. drum, combined with a ratchet which advances the drum through 1/24 of a revolution each time the circuit is momentarily closed through the 110 volt solenoid. Suggestions involving small additional cost concern mounting for improved appearance and reduction of noise.—*M. J. Zigler* (Wellesley).

4504. Schroeder, P. L. H. Douglas Singer. *Ment. Hyg., N. Y.*, 1940, 24, 639-641.—Obituary.—*W. L. Wilkins* (Milwaukee, Wis.).

4505. Seashore, R. H. The sixteenth annual meeting of the Midwestern Psychological Association. *Amer. J. Psychol.*, 1941, 54, 443.—Summary of activities of meetings held April 11-12, 1941, at Ohio University.—*D. E. Johannsen* (Skidmore).

4506. Spearman, C. Francis Aveling, 1875-1941. *Brit. J. Psychol.*, 1941, 32, 1-4.—Obituary.—*M. D. Vernon* (Cambridge).

4507. Spoerl, H. D. Swedenborg's psychology in application. *New-Church Messeng.*, 1941, 161, 43-45.—Swedenborg's concept of regeneration was closely analogous to that of reintegration in depth psychology. In both cases stress is laid on the disintegrating effect of egocentricity and the need for socialization in removing the neurosis. Swedenborg, however, demanded a theocentric as well as a sociocentric development.—*H. D. Spoerl* (American International College).

4508. Stumpf, C. *Erkenntnislehre*. (Epistemology.) Leipzig: J. A. Barth. Vol. I, 1939. Pp. 371. RM 19.00. Vol. II, 1940. Pp. 502. RM 20.80.—[Abstracted review; original not seen.] As opposed to the rationalism and empiricism of, for instance, Hume, the author shows, in the sense of Kant but with more psychological elaboration, the working together of a *a priori* and empirical knowledge. The theory of induction receives considerable attention.—*G. F. J. Lehner* (Miami).

4509. Thomson, G. H. Methods of estimating mental factors. *Nature, Lond.*, 1938, 141, 246.—The author defends his regression technique against alternative formula involving estimations proposed by Bartlett (see XI: 4883). It is pointed out that both methods yield exactly the same results.—*N. R. Bartlett* (Brown).

[See also abstracts 4555, 4579, 4731.]

NERVOUS SYSTEM

4510. Adrian, E. D. Localization in the central nervous system. *Nature, Lond.*, 1938, 142, 924.—Abstract.

4511. Alberti, J. L. Fenómenos psicoeléctricos: electroencefalogramas. Nuevas interpretaciones de las ondas "alfa" y "beta." (Psychoelectric phenomena: electroencephalograms. New interpretations of alpha and beta waves.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 521-541.—Alberti's interpretation is that in the cortical ganglion cells there is a metabolic function, apparently regenerative, related to attention, and represented by the alpha waves. This is interrupted by stimulation, when a collateral (beta) process appears; less is known of the beta than of the alpha process. After excitation has continued for a certain time, the vegetative process reappears, to replace the energy expended. This is reflected by scattered alpha waves in a beta field and transient lapses of attention. The facts that the alpha process cannot be suspended for more than 12-14 sec., is independent of mental activity, and continues during sleep and narcosis are proofs of its vegetative nature. As, however, the entire cortex is never completely passive at any one time, small and irregular beta waves may be imposed on alpha waves during physical and mental rest.—*M. E. Morse* (Baltimore, Md.).

4512. Brown, G. L., & Harvey, A. M. Neuromuscular transmission in the extrinsic muscles of the eye. *J. Physiol.*, 1941, 99, 379-399.—In decerebrate cats the refractory period of the nerve-muscle preparation is about 0.5 msec., and recovery of the second response is complete in 4-5 msec. The rapidity of action potential gives information about the early stages of facilitation, following a nerve volley, which is revealed by treatment with less than paralyzing doses of curarine. The increase in response to the second of a pair of maximal nerve volleys reaches its maximum between 0.8 and 1.5 msec. and disappears at 10 msec. The period of excess response is followed by a period of depression of the second response, which may last as long as 4 sec. The facilitation and depression are not observed in fully curarized muscle, stimulated directly. After eserine, single volleys evoke a series of spikes which undergo logarithmic decrement. The complex effect of double volleys suggests that eserine may prolong the refractory period of the muscle and interfere with conduction in the nerve, of the second of 2 closely succeeding volleys. Eserine lowers the threshold of fully curarized muscle to direct electrical stimulation. Intracarotid or intravenous injection of acetylcholine evokes a prolonged contraction accompanied by oscillatory action potentials. After eserine, however, both acetylcholine and repetitive nerve stimulation produce a contracture which blocks the propagation of excitation along the muscle fiber.—*M. E. Morse* (Baltimore, Md.).

4513. Carmichael, E. A., Honeyman, W. M., Kolb, L. C., & Stewart, W. K. Peripheral conduc-

tion rate in the sympathetic nervous system of man. *J. Physiol.*, 1941, 99, 338-343.—The velocity was calculated by determining the time differences in the skin resistance response at selected points supplied by the same sympathetic outflow from the cord. The time interval was taken to correspond to the difference in the length of the peripheral nerve pathways. Responses were simultaneously recorded from the proximal and distal parts of the leg and arm, and from areas at the back and front of the chest in the same dermatome. The velocity of conduction in the post-ganglionic sympathetic nerves to the skin was found to vary from 2.17-1.80 msec. in the arm; 2.30-2.03 in the chest; and 1.27-0.85 in the leg. The limitations of the method are indicated.—*M. E. Morse* (Baltimore, Md.).

4514. Chichinadze, N. [Localization of cortical processes in visual excitation; tests on pigeons deprived of one hemisphere.] *Byull. eksp. Biol. Med.*, 1940, 10, 182-184.

4515. Clark, S. L. The early use of implanted electrodes for stimulation of the cortex cerebri. *Science*, 1941, 94, 187-188.—The author calls attention to the methods and results obtained by Talbot about 1900 who employed small bipolar electrodes screwed into the skulls of dogs which were allowed to live so as to be stimulated on successive days.—*F. A. Mote, Jr.* (Connecticut).

4516. Cole, K. S., & Curtis, H. J. Electrical impedance of nerve during activity. *Nature, Lond.*, 1938, 142, 209-210.—Transverse impedance measurements were made on the long single cell of *Nitella* and on the giant nerve fiber of a squid. During the passage of the wave of excitation, the membrane resistance fell to approximately 0.5% of its original value. The membrane capacity, on the other hand, decreased only a few percent with no alteration of the phase angle.—*N. R. Bartlett* (Brown).

4517. Gibbs, F. A., Munro, D., & Wegner, W. R. A standard electroencephalographic technic for the localization of gross intracranial lesions. *New Engl. J. Med.*, 1941, 225, 279-282.—"A standardized and simplified form of Walter's technic for the localization of gross intracranial lesions is described, and the results obtained with it on a series of 144 patients suspected of having an expanding intracranial lesion are given."—*M. Keller* (Butler Hospital).

4518. Henry, C. E. Electroencephalographic individual differences and their constancy: I. During sleep. *J. exp. Psychol.*, 1941, 29, 117-132.—Alpha rhythms were recorded in 20 male adult subjects, 5 representing each of the 4 types known as rare, mixed, subdominant, and dominant alpha, (1) under the standard waking condition of minimal activity, (2) during all-night sleep, and (3) during psychological activity of diverse types. The fact that this population was heterogeneous with respect to waking alpha index (the percentage of time an alpha rhythm was present on the record) prior to sleep, but homogeneous with respect to all sleep rhythms, and not heterogeneous as before sleep as

regards waking alpha index after sleep, is taken to signify that individual differences in regard to alpha characteristics are not to be ascribed merely to a fixed inborn cortical organization.—*M. J. Zigler* (Wellesley).

4519. Iuniey, G. S., & Seliianinova, A. M. [Nature of cortical motor reaction; effect of anesthesia on the rate of the conductability of stimuli in the spinal cord.] *Byull. eksp. Biol. Med.*, 1941, 11, 153-156.

4520. Krabbe, K. H. [Neurology: lectures for medical students and general practitioners.] Copenhagen: Munksgaard, 1940. Pp. 390. Kr. 15.00.—[Abstracted review; original not seen.] Following a general chapter on the clinical examination of disorders of the nervous system, there are chapters devoted to acute inflammations, chronic inflammations, rheumatic muscular disease, traumatic diseases, congenital affections, tumours of the brain and spinal cord, vascular diseases, paroxysmal diseases of the nervous system, neuroses, and finally a chapter on the relation of nervous diseases to social life and insurance. At the end of the book is a list of the more important Scandinavian publications on diseases of the nervous system.—*N. R. Bartlett* (Brown).

4521. Lindberg, A. [The influence of longitudinal section of corpus callosum on the locomotion of the dog.] *Probl. mot. Neurol. Psikhiat.*, 1937, 55, 8 ff.—[Abstracted review; original not seen.] Longitudinal sections of the corpus callosum in 6 dogs were made to study the possibility of any resultant disturbance in the unity of brain functions. On the 1st day following operation the dogs made no attempt to move their legs. On the 2nd day in the majority of cases they made some slight attempt to approach food and to stand up, leaning first on the fore limbs and then raising the hind quarters. Attempts to walk revealed marked ataxia. These disorders gradually disappeared 10-14 days after operation, and by the 18th day they were able to run quickly. Examination of the brains 6 months later showed intact cortices.—*M. Keller* (Butler Hospital).

4522. MacIntosh, F. C. The distribution of acetylcholine in the peripheral and the central nervous system. *J. Physiol.*, 1941, 99, 436-442.—This study, on dogs and cats, supplies further evidence that in the peripheral nervous system acetylcholine is associated with cholinergic fibers and adds some data on its distribution in the central nervous system, where its significance is still hypothetical. Sympathetic ganglia and nerves containing mainly somatic motor or preganglionic autonomic fibers are rich in acetylcholine. Sensory nerves contain very little. In the cord, it is mainly confined to the gray matter; the dorsal columns contain only minute amounts. The gray matter in all regions of the brain contains more than the white, but the samples do not permit the deduction that it occurs in individual tracts or nuclei. The concentration is very variable and bears no definite relation to the comparative

abundance of cells or synapses. It may be located in non-neural tissues. The cortex and some nuclei and tracts are relatively rich in acetylcholine, other nuclei and tracts are relatively poor.—*M. E. Morse* (Baltimore, Md.).

4523. McKail, R. A., Obrador, S., & Wilson, W. C. The action of acetylcholine, eserine and other substances on some motor responses of the central nervous system. *J. Physiol.*, 1941, 99, 312-328.—Intracarotid injection of acetylcholine strikingly affected responses to electrical stimulation of the cat's motor cortex. Excitation predominated, followed by depression. The action was central. With intravenous injection, depression predominated. The action was on both the cortex and spinal cord, and was potentiated by eserine. Similar changes were produced by various depressor and also by some pressor agents. Probably the central action of injected acetylcholine was partially independent of vascular changes. Eserine depressed responses of the cortex and pyramidal tract and excited the spinal flexor reflex. Its action was central, probably independent of vascular changes, and, on the cord, both inhibitory and excitatory. There was presumptive evidence of release of acetylcholine in the central nervous system under stimulation by carbon dioxide, but no clear indication of such action with central vagus stimulation. These experiments give no information as to the possible function of acetylcholine as a quick transmitter at central synapses, but they definitely suggest a slow action influencing the passage of motor impulses in the central nervous system.—*M. E. Morse* (Baltimore, Md.).

4524. Stefantsov, V. D., Dmitriev, V. D., & Karamian, A. I. [Effect of excitation of the cerebellum with nicotine on the excitability of the cervical sympathetic nerve.] *Byull. eksp. Biol. Med.*, 1941, 11, 215-217.

[See also abstracts 4514, 4577, 4611, 4625, 4634, 4686.]

RECEPTIVE AND PERCEPTUAL PROCESSES

4525. Baxter, R. C., Jr. The effect of peripheral stimuli upon the positive fusional reserve. *Amer. J. Optom. Arch. Amer. Acad. Optom.*, 1941, 18, 297-305.—Measurements of positive fusional reserve using different test objects demonstrated that higher prism powers can be overcome when, in addition to the central element, peripheral stimuli appear in the test-target. A printed page proved more effective than simpler peripheral patterns. Use of different background colors indicated that maximal contrast aids in maintaining fusion. When the relative visibility of the target for the 2 eyes was changed by the insertion of neutral filters, the range through which fusion could be maintained was decreased, especially when the target presented no extra-macular stimuli.—*M. R. Stoll* (American Optical Company).

4526. Berger, C. The dependency of visual acuity on illumination and its relation to the size and function of the retinal units. *Amer. J. Psychol.*, 1941, 54, 336-352.—The present study was undertaken to determine the roles played by form and proportion, size, distance, illumination, etc. in visual acuity. The measurements of the minimum visual angle were made by continuously changing the distance between 2 small bright squares until they were recognized as separate or until they fused into one. It was found that: (1) the minimum visible distance between 2 bright points at brightness threshold is independent of the distance from the eyes; (2) with luminous test squares, the resolving power of the eye decreases continuously as the brightness increases; (3) the absolute value of the minimum visual angle is 180"-200"; (4) "the minimum visual angle is independent of the size of the retinal image as long as the latter is less than about 18 square mu for one square;" as the retinal image increases beyond this size, the resolving power of the eye increases until it reaches a value of 50"-60"; (5) when black squares on a white background are used, the minimum visual angle decreases with increase of retinal brightness. The data are considered with respect to the theory of retinal units. "From two to eight cones work together. . . . These retinal units of different sizes have probably all the same threshold for brightness, but probably not all of them are working at the same time."—D. E. Johannsen (Skidmore).
4527. Betts, E. A. Seeing problems of school children. *Optom. Wkly*, 1941, 32, 425-428.—This is the final article of a series (see XV: 1630; 3252; 3253), defining the concept of vision and summarizing the approaches to such problems as identification of vision needs, adequacy of far point tests and monocular tests, discomfort in vision, exact refraction, and prevention and correction of visual difficulties.—D. J. Shaad (Lawrence, Kansas).
4528. Blanchard, E. L., & Harper, H. A. Measurement of vitamin-A status of young adults by the dark-adaptation technique. *Arch. intern. Med.*, 1940, 66, 661.—[Abstracted review; original not seen.] The dark-adaptation technique is described which was used in a study of 10 college students on diets low in vitamin A.—D. J. Shaad (Lawrence, Kansas).
4529. Boeder, P. Aniseikonia. *Optom. Wkly*, 1941, 32, 530-532.—Definition and brief historical discussion of aniseikonia, with recommendations for clinical investigation of image size in cases of functional disturbances of the eyes.—D. J. Shaad (Lawrence, Kansas).
4530. Bosch, G. Las ilusiones y las alucinaciones en la vida y en el arte. (Illusions and hallucinations in life and art.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 305-330.—This is a philosophical discussion on the nature of reality, emphasizing that what is inner reality to one person is illusion or hallucination to another. Practically, but not theoretically, hallucinations can be distinguished from illusions.
- Perception, illusion, and hallucination are gradations. The roots of illusions and hallucinations are the primary emotions of love, fear, and anger. The author discusses mystical experiences (catastrophe, the triumph of love, and defense from anxiety by abandonment of the world) and the hallucinations of various great men (Mahomet, Martin Luther, and Swedenborg). Divine will is always revealed through a voice. Schizophrenic traits in art (El Greco, Blake) are discussed.—M. E. Morse (Baltimore, Md.).
4531. Brandis, S. A., & Gorkin, Z. D. [Variability of light sensitivity of the eye in relation to the effect of various ranges of the spectrum upon the skin.] *Byull. eksp. Biol. Med.*, 1941, 11, 56-59.
4532. Cave, C. J. P. Apparent enlargement of the sun at the time of rising and setting. *Nature, Lond.*, 1938, 141, 290.—"We look on the sky as a very shallow inverted bowl, and therefore look on the horizon as very much farther than the zenith. The sun having the same angular diameter wherever it is seems a larger body when on the horizon."—N. R. Bartlett (Brown).
4533. Colas-Pelletier, M. Histo-physiologie comparée de l'oeil des vertébrés et les théories de la vision. (Comparative histophysiology of the vertebrate eye and the theories of vision.) *Bull. Biol.*, 1940, 74, 102-176.—(*Biol. Abstr.* XV: 14642).
4534. Cott, H. B. Sense perception and the evolution of colour and pattern. *Nature, Lond.*, 1938, 142, 741-743.—Numerous examples are cited to illustrate the relation between sense capacity and biological function.—N. R. Bartlett (Brown).
4535. Craik, K. J. W., & Vernon, M. D. The nature of dark adaptation. *Brit. J. Psychol.*, 1941, 32, 62-81.—In part I evidence as to the locus of the process is presented; and an apparatus is described. Temporary blindness produced by mechanical pressure on the eye affords a convenient method of separating processes occurring in the eye and brain. Bright adaptation, both of rods and cones, is a retinal process. Dark adaptation is not delayed by pressure applied immediately after normal bright adaptation, indicating that circulation is not essential for photochemical regeneration. Maintained pressure causes a steady rise of threshold which increases for 30-40 sec. Part II deals with the part played by the positive afterimage. The afterimage contributes about half of the cone threshold rise during the first 2 min. following bright adaptation at 3000 e.f.c.; it seems not to be a simple after-discharge but to be connected with the regeneration of photo-product in the cones. In part III evidence from variations in the intensity of the bright adaptation and in the size of the test field is presented. The progressive delay of dark adaptation with increasing bright adapting illuminations ceases at approximately 12,000 e.f.c. This result agrees with photochemical theories, since the photo-product concentration will be almost constant at high adapting illuminations. With a test field subtending 10' rod summation is almost eliminated

and rod vision only 8 times more sensitive than cone vision. During dark adaptation summation increases.—*M. D. Vernon* (Cambridge).

4536. Crawford, B. H. Some observations on the rotating pendulum. *Nature, Lond.*, 1938, 141, 792-793.—The data for the degree of the illusion of rotation under different conditions of light adaptation suggest the use of this technique as a possible simple measure for the concentration of photochemical substance in the eye. (See XV: 4566.)—*N. R. Bartlett* (Brown).

4537. Crawford, B. H. The effect of field size and pattern on the change of visual sensitivity with time. *Proc. roy. Soc.*, 1941, B129, 94-106.—The author reports the results of experiments "showing the effect of size of a circular conditioning field on brightness threshold measurements made at the centre of the field: first, with the field steadily exposed and viewed; secondly, when the conditioning field has been cut off and the eye is returning to a state of dark adaptation. Conditioning and test fields are illuminated by white light. No field size effect is detectable over the range 60° diameter down to 3° diameter. Below 3°, for a steady state of adaptation various . . . effects of interference between the conditioning fields are shown. . . . For changing states of adaptation the effect of field size cancels out—except in an isolated case—if the initial conditioning field brightnesses are adjusted to give the same steady value of threshold: then after cutting off these various conditioning fields, the decrease of brightness threshold follows the same course. However the test patch of retina be brought to a given steady state of adaptation, as measured by the brightness threshold, it will recover its dark adaptation in the same way. These considerations apply both to foveal vision and to vision in the parafovea at 8° from the fovea."—*C. K. Trueblood* (Cambridge, Mass.).

4538. Creed, R. S. A binocular illusion. *Nature, Lond.*, 1938, 141, 977.—This is a discussion of the illusion described by Dixon (see XV: 4540). The illusion is historically known as the wall-paper experiment. It may demonstrate that the amount of convergence necessary to avoid diplopia is an important datum in distance judgments, but it is possible that the illusion is mainly due to the fused pattern being judged to be at about the known distance of the fixation point.—*N. R. Bartlett* (Brown).

4539. Detwiler, S. R. Some biological aspects of vision. *Sigma Xi Quart.*, 1941, 29, 112-129.—Retinal structure and retinal photopigments are discussed with relation to the habits of various animal species.—*N. R. Bartlett* (Brown).

4540. Dixon, H. H. A binocular illusion. *Nature, Lond.*, 1938, 141, 792.—"If an observer views a piece of linoleum . . . marked out as a checker-board in light and dark squares, it is possible by . . . locating the fixation point above the linoleum to produce the impression that the pattern is raised above the level of the floor, and that it is on a

smaller scale than that of the actual linoleum."—*N. R. Bartlett* (Brown).

4541. Dobriakova, O. A. [Effect of the center of the retina on its periphery.] *Byull. eksp. Biol. Med.*, 1941, 11, 152.

4542. Fedorov, N. T. [Electrophysiological and psychophysical methods in study of the function of vision.] *Usp. sovrem. Biol.*, 1941, 14, 61-78.

4543. Fedorov, N. T., & Mkrlicheva, L. Mechanism of light flicker fusion during the course of dark- and light-adaptation. *Nature, Lond.*, 1938, 142, 750-751.—It is suggested that fusion of flicker results from deformation of impulses from the retinal receptors during the passage of the impulses through the synaptic layer. Light-adaptation reduces the resistance of the synapses, while dark-adaptation produces an opposite effect. This suggestion is confirmed by the finding that 24 hours after strychnine injection, neither light nor darkness could influence the critical fusion frequency. Experiments with caffeine, however, revealed no noticeable effect upon the frequency.—*N. R. Bartlett* (Brown).

4544. Fernberger, S. W. Perceptual research in the United States. *Amer. J. Psychol.*, 1941, 54, 435-436.—This is a statistical analysis of work being done, facilities, and personnel in the field of perception. The conclusion is drawn that "there exists adequate facilities and a considerable number of competent investigators for the study of a great variety of visual and auditory problems but a much less adequate basis—both with respect to material and personnel—for research in the other perceptual fields."—*D. E. Johanssen* (Skidmore).

4545. Ferrara, A. [The visual threshold for blue in youth, old age, and aphakia.] *Ann. Ottal.*, 1941, 68, 147-154.—[Abstracted review; original not seen.] Visual threshold for blue was found to be higher in aged than in young subjects; in aphakia, it is lower than in young subjects. It is assumed that absorption of blue by the crystalline lens increases with age.—*D. J. Shaad* (Lawrence, Kansas).

4546. Frisch, K. v. The sense of hearing in fish. *Nature, Lond.*, 1938, 141, 8-11.—Minnows were conditioned to respond to tones ranging from 16 to 5000 c.p.s. when food was presented directly after the tone. The audibility threshold was of the same order as for humans. Discrimination between 290 and 345 c.p.s. was set up in a few fish.—*N. R. Bartlett* (Brown).

4547. Goss, G. C. L., Farmer, F. A., & McFarlane, W. D. A comparison of dark adaptation (biophotometer) tests on French and English school children in a Quebec community. *Canad. med. Ass. J.*, 1941, 44, 30-33.—Speed of regeneration of visual purple after bleaching of the retina with bright light was measured for about 300 subjects on 3 occasions. Regeneration times were reliably longer for French (resident) children (28.12 ± 0.52 sec.) than for English children (17.98 ± 0.45 sec.), and longer for girls (24.95 ± 0.54 sec.) than for boys (21.33 ± 0.52 sec.).—*E. S. Primoff* (U. S. Employment Service).

4548. Gould J., & Morgan, C. Hearing in the rat at high frequencies. *Science*, 1941, 94, 168.—Following preliminary training to an 8 kilocycle tone, thresholds for 9 rats were determined for 1, 2, 4, 8, 14, 21, and 40 kilocycles (40 kilocycles was the upper limit of the apparatus). Comparison of human and rat thresholds shows that the rat is poorer at 1 kilocycle, is approximately equal at 8 kilocycles, and becomes continuously better up to 20 kilocycles. It seems likely that the frequency most audible to the rat is as high as 40 kilocycles.—F. A. Mote, Jr. (Connecticut).
4549. Granit, R., Holmberg, T., & Zewi, M. Mode of action of visual purple. *Nature, Lond.*, 1938, 142, 397.—Adaptation to intense long wave lengths causes a 40-50% reduction in the electrical response (*b*-wave) to test lights. Short adapting wave lengths have a much smaller effect on the response to the test light, sometimes even causing it to increase. The total quantity of visual purple obtained from eyes in which the electrical response has been substantially reduced by adaptation is neither influenced by the adapting wave length, nor is it very much reduced in comparison with the amount of visual purple of dark-adapted control eyes. Therefore the hypothesis is advanced that "the active visual purple is active because of its particular manner of distribution, say, at the outer limb of the rod cell, but that a high concentration of the non-stimulating store of inactive material inside the cell is necessary for keeping up the charge at the surface. Illumination may then be assumed to lead to a depolarization of the surface spreading electrotonically and giving rise to the *b*-wave of the electrical response of the retina."—N. R. Bartlett (Brown).
4550. Gundlach, R. H., & Dice, R. A criticism of Lewis and Larsen's 'masked auditory thresholds.' *J. exp. Psychol.*, 1941, 29, 173-174.—Lewis and Larsen (see XV: 1224) used test-tones and masking tones belonging to the same harmonic series in the measurement of thresholds, intensity level, sensation level, and masked sensation level. They are here criticized for making measurements under conditions in which subjective tones were generated without always taking proper account of them. The authors charge that although the terms sensation level and masked sensation level signify phenomenal loudness, the calculations and presentations in Lewis and Larsen's study are based upon strictly physical magnitudes and are misleading.—M. J. Zigler (Wellesley).
4551. Herzau, W., & Ogle, K. N. Über den Grössenunterschied der Bilder beider Augen bei asymmetrischer Konvergenz und seine Bedeutung für das zweikugige Sehen; ein Beitrag zur "Aniseikonia"-Forschung. (Size difference between the images of both eyes in asymmetrical convergence and its significance for binocular vision; a contribution to the study of "aniseikonia.") *v. Graefes Arch. Ophthalm.*, 1937, 137, 327-363.—[Abstracted review; original not seen.] The assumed change of the proportion of the size of the images to compensate for the inequality of the images is verified through stereoscopic experiments. The retinal images correspond to one another in asymmetrical convergence as in symmetrical convergence. The absence of disorders in binocular vision is, however, no argument against the significance of aniseikonia.—H. L. Ansbacher (Brown).
4552. Hofmann, A. Plastik im Sehen und in Photobildern. (Depth in vision and in photographs.) *Photogr. Korr.*, 1939, 75, 29-30.—[Abstracted review; original not seen.] Depth perception can be achieved not only through the use of 2 different lenses or through both eyes, but also 2 different parts of the same lens furnish different pictures of the same object and can be used in depth perception. Mountain goats must be able to estimate the width of a precipice they are about to jump. Due to the position of their eyes they cannot use them in binocular vision. But they can close their eyes so that 2 separate parts of the lens produce 2 somewhat different pictures of the space to be estimated.—H. L. Ansbacher (Brown).
4553. Høygaard, A. [Night blindness as result of deficiency in vitamin A.] *Klin. Wschr.*, 1940, 19, 1139 ff.—(*Child Develpm. Abstr.* XV: 566).
4554. Hughes, J. W. The monaural threshold: effect of a subliminal contralateral stimulus. *Nature, Lond.*, 1938, 141, 216.—Abstract.
4555. Hunt, E. P., & Palmer, C. E. Medical evaluation of nutritional status. II. Measurement of visual dark adaptation with the adaptometer. *Milbank mem. Fd Quart. Bull.*, 1940, 18, 403-424.—(*Biol. Abstr.* XV: 14369).
4556. Hunt, F. L. Sound pictures in auditory perspective. *J. Soc. Mot. Pict. Engrs*, 1938, 31, 351-357.—[Abstracted review; original not seen.] Previous experiments with stereophonic transmission have shown that as little as 2 tracks yields a strong stereophonic effect and that 3 tracks are not necessary. The author reports further experiments with 2 sound tracks. 2-sound-track recordings were reproduced separately over 2 loudspeakers or electrically mixed over 1 loudspeaker. The effect was compared with that of 1-sound-track recordings, reproduced over 2 loudspeakers and over 1 loudspeaker. The superiority of stereophonic reproduction was established.—H. L. Ansbacher (Brown).
4557. Iudina, E. F. [Correlation between olfactory and vestibular apparatuses; effect of excitation of the olfactory receptor with thymol on the vestibular apparatus.] *Vestn. Otorinolaryng.*, 1941, No. 3, 32-35.
4558. Kekchev, K. K., Shoiapnikova, O. A., & Kavtorina, A. V. [Inadequate action of excitants on the sensibility of achromatic vision; summation of effects during action of two excitants.] *Byull. eksp. Biol. Med.*, 1940, 10, 187-190.
4559. Krapf, E. E. La luz como estimulante psicofísico y las vías retino-hipofisarias. (Light as a psychophysical stimulant and the retino-

- hypophyseal nervous system.) *An. Fac. Med. Montevideo*, 1940, Spec. issue, 185-192.—(*Biol. Abstr.* XV: 14326).
4560. Kravkov, S. V., & Nikiforova, O. I. [Increase of sensibility of peripheral vision by means of preliminary illumination of the eye with red light.] *Byull. eksp. Biol. Med.*, 1941, 11, 160.
4561. Lacey, J. I., Lacey, B. C., & Dallenbach, K. M. Areal and temporal variations in pain sensitivity. *Amer. J. Psychol.*, 1941, 54, 413-417.—"In a preliminary study, the relative sensitivity to pain of 12 areas on the left arm was investigated in 50 O's with a constant-pressure needle-algesimeter by the method of paired comparisons. The results may be summarized as follows. (1) Both negative and positive time-errors occur in the successive comparisons of pain-intensities, the former in greater frequency (2.6 times as great) and with greater magnitude (1.4 times as great) than the latter. There is, therefore, a strong tendency for a first pain to intensify an immediately subsequent pain. (2) The existence of time-errors of both signs is attributed to the fact that the interval between stimulation of the first and second area of a pair was not controlled. (3) Despite great individual variability, the conclusion is justified that pain sensitivity is greatest at 'vital areas' of the body."—D. E. Johanssen (Skidmore).
4562. Lasky, M. A. Simulated blindness. *Arch. Ophthalm.*, Chicago, 1941, 25, 1038-1049.—Brief description and discussion of various methods of detecting malingering.—M. R. Stoll (American Optical Company).
4563. Lewis, D. Reply to Gundlach and Dice. *J. exp. Psychol.*, 1941, 29, 174-176.—In response to Gundlach and Dice's criticism of Lewis and Larsen's study on masked auditory thresholds (see XV: 4550), Lewis points out that there is prevalent among psychologists a misunderstanding in regard to the meaning of the term sensation level, which has reference to a physical dimension and not to a psychological quantity. Both sensation level and masked sensation level are expressed "in terms of number of decibels above clearly defined reference intensities; and a decibel . . . is a unit, not in a loudness scale, but in a logarithmic scale of sound intensity." Lewis also denies ignoring subjective harmonics and states that "the measurements which we have been making (especially measurements of masked absolute thresholds) furnish data by means of which subjective harmonics may be estimated."—M. J. Zigler (Wellesley).
4564. Lindberg, B. Ögonundersökningar och psykologi. (Tests of vision and psychology.) *Svenska Läkartidn.*, 1941, 38, 1193-1196.—The writer discusses the influence of psychological factors on certain optometric investigations with special reference to Boströms pseudo-iso-chromatic tables. He concludes from personal observations that personality structure, character, temperament, the actual psychological situation, body type, etc. may have a greater bearing than has been admitted in the question of the determination of simulance and dissimulance. Brief bibliography.—M. L. Reymert (Mooseheart Laboratory for Child Research).
4565. Ludvigh, E. Scotopic luminosity curve and the absorption spectrum of visual purple. *Nature, Lond.*, 1938, 141, 1141-1142.—There is a marked correspondence between the absorption spectrum of rhodopsin and the scotopic visibility curve when the latter is corrected for the absorption spectra of the ocular media. The retinal sensitivity to blue is greater than previously assumed; it is not necessary to invoke Kundt's rule to explain the discrepancy between the two curves.—N. R. Bartlett (Brown).
4566. Lythgoe, R. J. Some observations on the rotating pendulum. *Nature, Lond.*, 1938, 141, 474.—When a simple harmonic pendulum is viewed binocularly with a neutral-tint filter before one eye, the pendulum appears to swing in an ellipse. The simplified explanation is that the latent period of the unobserved eye is shorter than that in the other eye. Further observations on the illusion are presented.—N. R. Bartlett (Brown).
4567. Makarov, P. O. [Investigation of pain reaction in man at microintervals.] *Byull. eksp. Biol. Med.*, 1941, 11, 218-220.
4568. Malmo, R. B., & Ellis, M. M. Sour thresholds as a function of the pH of hydrochloric and sulphuric acids. *Amer. J. Psychol.*, 1941, 54, 410-412.—In order to determine whether other variables besides the pH are significant in the discrimination of the taste of sour, the psychometric functions for 6 O's to the taste of sour in hydrochloric and in sulphuric acid were obtained. pH values of 6.9, 6.0, 5.0, 4.5, 4.0, and 3.5 for each acid were used as stimuli. O's were required to report on the degree of sourness by the method of absolute judgment; 6 categories were used. 10 judgments of each stimulus were obtained on each of 10 days. Results were treated by Urban's constant process. It was found that the curve showing the psychometric function for judgments of "less sour" (categories 1-3 on the absolute scale) were much more steep for H₂SO₄ than for HCl; there were 6 reversals in the curve for the latter as compared to 2 for the former. Limens for H₂SO₄ were constant for all O's, those for HCl widely divergent. The values of *h* are markedly larger for H₂SO₄ than for HCl. These data signify that the discrimination of sour depends on other variables than merely the pH, and further investigation is called for to determine what these are.—D. E. Johanssen (Skidmore).
4569. Martin, T. M., & Pickford, R. W. Effect of veiling glare on apparent size and distance. *Nature, Lond.*, 1938, 141, 371.—"When glare is present, the relative apparent sizes of similar disks at different distances approximate to the sizes expected on the inverse square law. As the glare increases, this approximation increases too, until, with monocular vision and glare such that all distance cues are cut out, it is very close indeed."—N. R. Bartlett (Brown).
4570. Morton, J. D. A binocular illusion. *Nature, Lond.*, 1938, 142, 537.—This is a note on

Paget's paper (see XV: 4572). A "suspended image" may be seen behind the true locus if a small pattern is held close to the eyes, and the eye muscles are relaxed. The illusion of a magnified object is assisted if the eyes are permitted to move over the object, or if the pattern is moved slowly towards and away from the observer.—N. R. Bartlett (Brown).

4571. Ocampo, G. de, & Cruz, J. N. Dark adaptation in adult beriberi. *Acta med. philipp.*, 1940, 2, 175-188.—(*Biol. Abstr.* XV: 14838).

4572. Paget, R. A. S. A binocular illusion. *Nature, Lond.*, 1938, 142, 77-78.—By changing the degree of convergence of the eyes one may cause a well-defined pattern of alternate squares of black and white to appear to be suspended in different planes. If the distances between centers of the pattern are about equal to the interocular distance, the pattern may be made to appear at 5 different distances. The apparent size of the pattern increases in proportion to its apparent distance from the eyes. (See also XV: 4538; 4540.)—N. R. Bartlett (Brown).

4573. Peddie, W. Establishment of the trichromatic theory of color vision. *Nature, Lond.*, 1938, 142, 109.—Abstract.

4574. Reboul, J. A. Les phénomènes électriques de l'oreille interne et leur rôle dans les théories de l'audition. (The electrical phenomena of the inner ear and their part in hearing theories.) *J. Phys. Radium*, 1938, 9, 428-436.—[Abstracted review; original not seen.] This is a discussion of the electrical phenomena of the ear known as the Wever-Bray effect. The electrical proportions in the inner ear are calculated; the dependency of the Wever-Bray effect from the intensity and the frequency of the stimulus, and the influence of the place of application of the electrodes are treated. The significance of the phenomena for hearing theory is pointed out.—H. L. Ansbacher (Brown).

4575. Riddell, W. J. B. The problem of color vision in insects. *Glasg. med. J.*, 1941, 135, 48.

4576. Sakharova, O. S. [Changes of rhythmic tactile sensations in pain excitation.] *Byull. eksp. Biol. Med.*, 1941, 11, 226.

4577. Sand, A. Autonomous rhythmical activity of sense organs. *Nature, Lond.*, 1938, 141, 285-286.—Records taken from fibers of the nerve from a capsule containing a group of ampullae, isolated from a pithed ray, show spontaneous rhythmical discharges. "A record . . . shows three impulse trains at 5, 8 and 9 per second. A record the next day shows the same three fibers discharging at 9, 9 and 10 a second."—N. R. Bartlett (Brown).

4578. Schouten, J. F. The rotating pendulum and the state of adaptation. *Nature, Lond.*, 1938, 142, 615-616.—The latent period as measured by the rotating pendulum illusion (see XV: 4536) is not a reliable index to the concentration of photochemical substance. Experiments with glare sources in the field of view reveal a considerable drop in foveal

sensitivity that is not explainable on the basis of scattered light or of diffusion of photochemical substances in the retina. The author concludes in favor of an hypothesis of an inhibitive influence transmitted towards the fovea.—N. R. Bartlett (Brown).

4579. Schouten, J. F. Synthetischer Schall. (Synthetic sound.) *Philips' tech. Rdsch.*, 1939, 4, 176-183.—[Abstracted review; original not seen.] An apparatus is described by which currents of any vibration-form may be produced. The influence of phases of various vibrations on perception was determined. Ordinarily the ear cannot perceive an influence of phases whether there are few or many overtones. But the phase becomes important if the sound intensity is great; then a second objective harmonic is added to the second subjective harmonic. The subjective overtone may disappear. It was possible to measure the extent of the distortion arising in the ear; with an intensity of 100 and 106 phon it was 3% and 8% respectively.—H. L. Ansbacher (Brown).

4580. Stevens, S. S., Morgan, C. T., & Volkman, J. Theory of the neural quantum in the discrimination of loudness and pitch. *Amer. J. Psychol.*, 1941, 54, 315-335.—The authors present evidence from 2 experiments (discrimination of auditory intensity and of frequency) which indicate that the relationships investigated are best described by the rectilinear functions demanded by the quantal theory. Because of the relatively large over-all fluctuation in sensitivity, in order to test the quantal theory directly it is necessary to present the standard and comparison stimuli in close temporal succession. The apparatus by which this was accomplished is described. Rectilinear functions were fitted to 15 sets of data from the frequency discrimination experiments by the method of least squares, and the phi-function of gamma was fitted to the same data by Urban's tables. The chi-square test of goodness of fit was applied and the *P*-values determined. The *P*-values favor the quantal hypothesis; the composite coefficient for the phi-function of gamma was .008, for the rectilinear function .931. The size of the quantum does not remain unchanged under all conditions, and it is necessary to make determinations in the same experimental session. When the results obtained in several sessions are averaged, the psychometric function tends to assume the sigmoid form. The measure of differential sensitivity in audition is 2 quanta.—D. E. Johannsen (Skidmore).

4581. Stewart, C. P. Nutritional factors in dark adaptation. *Edinb. med. J.*, 1941, 48, 217-236.—The purpose of this lecture is to call attention to other nutritional factors as essential to dark adaptation as vitamin A. Great caution is necessary in using dark adaptation as an index of the adequacy of vitamin A intake; Stewart has failed to find any close relation between them. Among other essential nutritional factors are oxygen, vitamin C, and possibly B; among the non-nutritional, are age, fatigue, pupil diameter, digestive efficiency, hepatic

disease, and infections. Stewart's experiments show that subjects with high intakes of both A and C have good adaptation; with low intakes of both, poor adaptation. Intake of C alone showed no correlation with dark adaptation. In many cases, normal dark adaptation (for age) may be improved by daily large doses of A or C. In view of the importance of carbohydrate metabolism for functioning of nerve tissue, still other factors are probably involved.—*M. E. Morse* (Baltimore, Md.).

4582. Stuhlman, O. The asymmetrical response of the human ear in relation to the problem of combination tones. *Bull. Amer. Musicol. Soc.*, 1941, 5, 19-20.—The problem of combination tone production has been studied through the construction of a 20X model of the ossicle bones.—*P. R. Farnsworth* (Stanford).

4583. Thalman, W. A., & Dallenbach, K. M. An experimental study of the relationship between attentivity and intensity. *Amer. J. Psychol.*, 1941, 54, 367-373.—“(1) Is attentivity an independently variable dimension of experience? (2) As a quantitative dimension, does attentivity . . . come under Weber's law?” In order to answer these questions the limens for attentivity and intensity were determined under the same conditions. 2 circular spots of light with a fixation-point between them were presented for 106 ms. There were 2 standard stimuli, one 3 times the intensity of the other. The method of constant stimulus differences was used with 3 trained O's. Under one instruction O was asked to report which field was more intense, under the other which was clearer. The upper and lower limens, h , and PSE were determined for each standard, for each O, for each space order, and for each instruction. It was found that the PSE is consistently closer to the standard under instructions to report on intensity than under instructions to report on clearness. The limens for clearness are larger than those for intensity. The ratios of the limens to the standards indicate that attentivity follows Weber's law. A comparison of the results in the 2 space orders indicates the space error to be considerably larger under attentivity than under intensity instructions, and its direction agrees with O's handedness.—*D. E. Johannsen* (Skidmore).

4584. Thouless, R. H. Eye and brain as factors in visual perception. *Nature, Lond.*, 1938, 142, 418-421.—The notion of simple transmission of retinal pictures to the brain must be rejected. A particular feature of perceptual processes that has been overlooked is the wide range of individual differences. There are reliable differences in the degree to which constancy phenomena appear to different persons; the high correlations for various types of constancy phenomena among observers suggest the use of phenomenal regression measures as indices for some factor of sensory organization. Such indices might prove valuable in applied fields.—*N. R. Bartlett* (Brown).

4585. Verrier, M. L. Vision du relief et vision binoculaire; à propos de la double fovea des oiseaux

rapaces diurnes. (Depth perception and binocular vision; apropos of the double fovea of diurnal preying birds.) *Bull. Biol.*, 1940, 74, 88-93.

4586. Volkmann, J. Quantum theory in psychology. *Trans. N. Y. Acad. Sci.*, 1941, 3, 213-217.—The quantum theory of discrimination, originally proposed by von Békésy, assumes that a stimulus of a given magnitude excites maximally a certain number of quanta (neural units), and that there remains a small “surplus of stimulation,” less than the amount required to excite one additional quantum. The magnitude of this surplus fluctuates during the presentation of a constant stimulus in such a way that each of the varying amounts of surplus (zero to just less than one quantum) occurs as frequently as any other. From this may be predicted the sigmoid form of the psychometric function usually obtained in discrimination experiments. It may further be predicted that when the stimulus-increment is superimposed on the standard stimulus too briefly to allow the fluctuation to occur, the psychometric function will assume the form of an oblique straight line: the frequency with which an additional quantum is excited is directly proportional to the size of the stimulus-increment. (In simplest form the addition of one quantum yields the perception of difference.) Experiments are described the results of which confirm the predictions in the fields of auditory pitch and intensity discrimination.—*F. W. Finger* (Brown).

4587. Voneš, Z. Das physikalische Problem der Retina des menschlichen Auges. (The physical problem of the retina of the human eye.) Zagreb: Astra-Klub, 1938. Pp. 107.—[Abstracted review; original not seen.] The author is primarily concerned with the transformation of light into nervous stimulation. Her theory is founded on current views of atom structure. Each corpuscle has a whirling structure and is positively or negatively charged according to the rotational direction. When a proton changes its direction, a whirling electron is emitted. She compares the arrangement of the cones with that of the illuminated interference points of a crystal. The mechanism is explained on an electro-magnetic basis. “Vertically to its electric vector, the whirling photon energy yields a magnetic field strength which must take on a quite specific structure which in turn gives the field a characteristic appearance. In this structural field the foundation of subjective color qualities is to be sought.”—*H. L. Ansbacher* (Brown).

4588. Waters, C. E. Illusions in printed matter. *Science*, 1941, 94, 136-137.—See also XV: 2528.

4589. Weber, C. O. The short-circuit phenomenon of phi-movement. *Amer. J. Psychol.*, 1941, 54, 404-409.—A large scale model of the Yogi puzzle, with the picture omitted, was constructed. A black hand moved over the face of a plain white disc in a clockwise direction. The angular excursions could be varied from 50° to 330° of arc, and the speed of movement could be changed by varying the tension of the spring. Hands of varying lengths

and widths could be used. The results showed that: (1) real movement is dominant for an excursion up to 230° , while short-circuit phi appears on the average when the counter-clockwise distance is 130° ; (2) when the excursions in an experiment are in serial order both real and apparent movement are stronger than when the order is random; (3) the short-circuit phi-movement is stronger when the velocity of the hand increases; the apparent movement is seen to an average extent of 76.9° for the slowest, 130.0° for the medium, and 137.0° for the greatest velocity; (4) apparent movement is stronger for a hand of 5.5 cm. (short-circuit phi seen over an average trajectory of 96.2°) than for one of 9.5 cm. (average trajectory = 83.2°); (5) practice usually decreases the strength of the illusion; (6) on the average, black arrows in the field tend to re-enforce real but not apparent movement, but individual differences are marked.—D. E. Johannsen (Skidmore).

4590. Werner, H. Old and new conceptions of stereopsis. *Arch. Ophthalmol., Chicago*, 1941, 25, 1076-1078.—The inadequacy of Hering's "geometric" theory of corresponding points is indicated by these facts: (1) Binocular stereopsis is associated with functional change of projection. (2) Disparate points of a binocular image appear functionally displaced with respect to their positions in the monocular field. (3) Corresponding points are not always seen in the fixation plane.—M. R. Stoll (American Optical Company).

[See also abstracts 4480, 4496, 4550, 4594, 4610, 4621, 4622, 4626, 4628, 4637, 4639, 4773, 4774, 4778, 4800, 4807.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

4591. Bruce, M. Factors affecting intelligence test performance of Whites and Negroes in the rural South. *Arch. Psychol., N. Y.*, 1940, No. 252. Pp. 99.—3 intelligence tests, the Kuhlmann-Anderson Group Test, the Grace Arthur Point Performance Scale, and the 1916 Stanford Binet, were administered to 521 white and 432 colored children aged 6-12.9 years in one county in the Piedmont region of Virginia in an attempt to isolate factors which "differentiate between White and Negro groups" and which "are responsible for the subnormal intelligence quotients in the rural South." The major findings showed both Whites and Negroes below national averages and Whites superior to Negroes. Distributions of total scores showed skewness in the Negro sample and absence of skew in the White sample. This lends itself to interpretation in the light of selective migration among Negroes but not among Whites. "The investigator is inclined to believe that there is an innate difference between the particular White and Negro groups studied," though the demonstrated difference in the shapes of the distribution curves "prevents this

study from being used as evidence of the superiority of the White race." The author attributes the general inferiority of rural samples of the South either to innate inferiority or to the failure of psychologists to develop tests free from cultural influence.—E. L. Horowitz (City College, New York).

4592. Cook, T. W. Mirror position and negative transfer. *J. exp. Psychol.*, 1941, 29, 155-160.—The average errors for tracing a complex pattern via mirror were found to increase significantly when the experiment was repeated with the mirror in a different position, but the time values did not so clearly indicate negative transfer. However, the present study aims primarily to show that transfer contingent upon a repetition of mirror tracing experiments under partially altered conditions need not be negative. When trials were made first with one hand and then with the other and with the position of the mirror unchanged (center position), a positive transfer was revealed both in time and error averages.—M. J. Zigler (Wellesley).

4593. Crawford, M. P. The cooperative solving by chimpanzees of problems requiring serial responses to color cues. *J. soc. Psychol.*, 1941, 13, 259-280.—6 chimpanzees learned individually to operate 4 stimulus presentation boxes in the order yellow, green, red, blue to obtain food from a vendor. For cooperative work each subject had access to 2 stimulus boxes and a vendor. "Cooperative behavior was said to occur when a subject (a) watched the partner and responded to its manipulation of a stimulus by pushing the succeeding one on its own side, and (b) solicited the partner with manual gestures to push one of its stimuli. The two adolescents with whom most testing was done watched and solicited. Both of the [chimpanzee] children watched but neither solicited. One adolescent seemed to direct her partner toward a particular one of the two devices in the partner's cage by turning her in the proper direction and pushing her toward it. The significance of these directive aspects of solicitation for a consideration of the phylogeny of language behavior is discussed."—G. Brighthouse (Occidental).

4594. Dmitriev, V. D. [Effect of conditioned reflexes on the variability of motor chronaxy during excitation of the olfactory receptor in the dog.] *Byull. eksp. Biol. Med.*, 1941, 11, 252-254.

4595. Fedotov, T. S. [Conditioned reflexes in dogs, resuscitated after clinical death by blood-letting.] *Byull. eksp. Biol. Med.*, 1941, 11, 186-189.

4596. Foley, J. P., Jr. A classroom demonstration of the conditioned response. *Amer. J. Psychol.*, 1941, 54, 418-422.—Description of a modification of Bousfield's technique (see XIII: 5593) which produces unequivocal response and can be simultaneously observed by a large class.—D. E. Johannsen (Skidmore).

4597. Gagné, R. M. External inhibition and disinhibition in a conditioned operant response. *J. exp. Psychol.*, 1941, 29, 104-116.—This study shows that an extra stimulus (a buzzer sounded for

4 seconds or scratching at the back of the starting box until the white rat turns around), introduced at different times during an experimental session, comprising 15 trials of acquisition and the number of trials required for extinction of the response, can have different effects upon the magnitude of the response. In the case of the 'scratch,' the response was depressed during acquisition (external inhibition) and increased during extinction (disinhibition). However, the buzzer is designated an emotion-producing stimulus, which has a depressing effect whenever used, although it is followed on the next trial by an increase of response.—*M. J. Zigler* (Wellesley).

4598. **Headlee, C. R., & Kellogg, W. N.** Conditioning and retention under hypnotic doses of nembutal. *Amer. J. Psychol.*, 1941, 54, 353-366.—The buzz-shock conditioning method was used on 6 mongrel dogs. The conditioned stimulus was a pure tone, 1000 cycles, presented for 2 sec., and overlapped at the last .2 sec. of its occurrence by a make-break DC shock applied to the right hind foot. Graphic records of movements of all 4 feet, of respiration, of the buzz, the shock, and the time were made. Training was in groups of 100 trials, with a rest period after every 20 trials. 4 such blocks of 100 trials were given each animal, half with and half without the drug. The results showed that: (1) conditioning is present but is less efficient under the drug; (2) the learning curve, computed from both frequency and amplitude of the CR, was sigmoid; (3) the latency of the CR was greater under the drug than under the normal state; (4) the duration of the CR tended to be shorter under the drug; (5) retention of a CR acquired under nembutal could be demonstrated later in the normal state; (6) a CR acquired in the normal state did not appear in the drug condition. The data are considered from a theoretical point of view.—*D. E. Johannsen* (Skidmore).

4599. **Hilgard, E. R., Miller, J., & Ohlson, J. A.** Three attempts to secure pupillary conditioning to auditory stimuli near the absolute threshold. *J. exp. Psychol.*, 1941, 29, 89-103.—Experiments are described that were designed to reproduce L. E. Baker's conditions (see XIII: 763) in which pupillary responses were reported to be conditioned by auditory stimuli of near-threshold intensity. Conditioning, test, and control trials were made when a conditioning stimulus, a tone of 1900 cycles or a noise produced in headphones by interruption of direct current, accompanied a suitable change in illumination both with fixation for a distance of 100 cm. and for a distance of only 15 cm. Negative results were secured for attempts to condition constriction as well as for those for dilation.—*M. J. Zigler* (Wellesley).

4600. **Hunt, W. A.** Anchoring effects in judgment. *Amer. J. Psychol.*, 1941, 54, 395-403.—"If judgments made with an unanchored scale be repeated with the scale anchored by the further definition of one extreme, there is a shift in the

average value of the stimulus-judgments, and this shift is in a direction away from the anchoring value. Thus, if a scale is anchored at its low extreme, the judgments tend to rise, and vice versa. The effect seems to be stronger if some concrete illustration is used as an anchoring point." The effect is demonstrated with affective, esthetic, and ethical judgments, as well as in judgments of how intelligent children appear in photographs. It is concluded "that there are common principles governing acts of judgment, and that these 'laws' of judgment must be considered in experimental procedures involving the use of scales, as well as in any theoretical consideration of value judgments."—*D. E. Johannsen* (Skidmore).

4601. **Lorge, I.** Superior intellectual ability: its selection, education and implications. *J. Hered.*, 1941, 32, 205-208.—A valid appraisal of superior ability can be obtained by test, if conditions of experience, rapport, test standardization, etc. are adequately met. Within a homogeneous group which meets these requirements individual differences in test reactions are interpreted as natively governed; that is, such differences in IQ trace back to qualitative differences in genes, multi-factorial in origin. The development of innate potentiality will be shaped by activities, experiences, wants, and environmental opportunities. It is the natural right of the intellectually superior to get this opportunity and society's obligation to supply it, from kindergarten through college, preferably in segregated groups. Superior intellectual ability, coupled with factors of personality, attitude, and drive, will yield the largest proportion of leadership to be found in any social group. Society should make good use of the developed abilities of its most superior members.—*G. C. Schwesinger* (American Museum of Natural History).

4602. **Scheerer, M., Goldstein, K., & Boring, E. G.** A demonstration of insight: the horse-and-rider puzzle. *Amer. J. Psychol.*, 1941, 54, 437-438.—*D. E. Johannsen* (Skidmore).

4603. **Seeleman, V.** The influence of attitude upon the remembering of pictorial material. *Arch. Psychol.*, N. Y., 1940, No. 258. Pp. 69.—A questionnaire designed to measure attitude toward Negroes was administered to 400 college students. Samples at both extremes of the scale were selected for further study, 120 males and 40 females. Pictures of Negroes and Whites were presented in a recognition experiment. The pro-Negro subjects "recognized significantly more Negro pictures correctly than did the anti-Negro group." The same subjects were presented with another series of Negro and White portraits with descriptive phrases which had been paired and equated for favorableness and unfavorableness. After a 10-minute pause these faces were re-presented to be matched against a complete list of the phrases previously used. Results in this experiment were less clear-cut, but the trend of the correct matchings tended to conform to the attitudes. Intensive interviews of 25 subjects

at the extremes of the attitude scale suggest that memory and not simply perception was involved in the production of these results. The interviews are discussed in some detail.—*E. L. Horowitz* (City College, New York).

4604. Solodukho, I. G. [Formation of a motor-alimentary conditioned reflex by means of independent combination of the motor component with the indifferent stimulus: contribution to the problem of two-way conduction.] *Méd. exp., Kharkov*, 1941, No. 1, 56-63.—Salivary conditioned responses to bell, light, prick, and siren were established. A motor reflex to food was established by reinforcing accidentally occurring movements of the forepaw with food, in the absence of any of the former stimuli. In the third stage of experimentation, these stimuli were presented (one by one) when the movements of the paw appeared and, as usual, were followed by food. Thus, originally the connection auditory (e.g.) analyzer - food center was established, later the connection motor analyzer - food center; but this latter connection functioned in both directions, when the siren (e.g.) would arouse paw movements through the mutual connection with the food center. This possibility of 2-way conduction may be responsible for many of the hallucinatory symptoms in mental diseases. Russian and French abstracts.—*L. J. Stone* (Vassar).

[See also abstracts 4474, 4503, 4615, 4623, 4629, 4666, 4743, 4744, 4768, 4824, 4837, 4855.]

MOTOR AND GLANDULAR RESPONSES (incl. Emotion, Sleep)

4605. Asher, L. Le récent développement de quelques principes physiologiques généraux. (The recent development of some general physiological principles.) *Scientia, Milano*, 1941, 69, 114-120.—Recent physiological research indicates the autonomy of elementary biological functions in living organisms. Fundamentally, physiological conditions of excitation and repose are not opposites, and the latter is better understood in the light of subliminal excitation. This gives new importance to the refractory phase. The humoral nature of excitation is discussed in detail, but in the author's opinion, the electrical theory should not be discarded: only a dualistic interpretation can do justice to all the facts. There appears to be a close relation between the all-or-none principle and the progressive excitability of terminal organs, the link between the excitatory intensity and the graduated frequencies of the reaction, and the fundamental physiological principles of regulation.—*H. Beaumont* (Kentucky).

4606. Behnke, A. R., & Willmon, T. L. Physiological effects of high altitude. *Nav. med. Bull., Wash.*, 1941, 39, 163-178.—Men subjected to high altitudes, ranging from 9,000 to 25,000 feet, develop symptoms of chronic altitude sickness characterized by irritability, nervousness, insomnia and fatigue, and occasional attacks of nausea, anorexia, and vertigo. Anoxia, or oxygen lack, which may begin at an altitude of 9,000 feet will terminate in coma

at 25,000 feet during rapid ascents. Symptoms which may appear at about 12,000 feet are fatigue, depression, sleepiness, euphoria, or various other manifestations of emotional instability. Headache is usually a symptom which remains constant as the altitude is increased. The most serious impairment of the critical faculties is that of judgment.—*J. E. Zerga* (Los Angeles, Calif.).

4607. Carmichael, E. A., Honeyman, W. M., Kolb, L. C., & Stewart, W. K. A physiological study of the skin resistance response in man. *J. Physiol.*, 1941, 99, 329-337.—The experiments were made on healthy young adults. If the subject is adequately warmed, the skin response may be obtained from any part of the extremities, the body wall, and the ears. The latency of the response varies according to the region of the body (shortest from the chest wall, followed in order by ear, finger, and toe) and also with the temperature of the part. The response is an indication of the activity of the sympathetic system, being dependent on the synchronous development of both vasoconstriction and sweating, occurring when either of these components is present, but being abolished when both are absent.—*M. E. Morse* (Baltimore, Md.).

4608. Chumburidze, N., & Pchilhadze, R. [Increased effort of individual contractions of a tired muscle in relation to increase of the load under various conditions of its activity.] *Byull. eksp. Biol. Med.*, 1940, 10, 157-159.

4609. Dawes, B. The melanin content of the skin of *Rana Temporaria* under normal conditions and after prolonged light and dark-adaptation: a photometric study. *J. exp. Biol.*, 1941, 18, 26-49.—*C. K. Trueblood* (Cambridge, Mass.).

4610. Dmitriev, V. D. [Variability of motor chronaxy in dogs following excision of the cerebral cortex, from the effect of stimulation of the olfactory receptor.] *Byull. eksp. Biol. Med.*, 1941, 11, 368-370.

4611. Eggleton, M. G. The effect of alcohol on the central nervous system. *Brit. J. Psychol.*, 1941, 32, 52-61.—The degree of disturbance of central nervous system function, as indicated by performance on typewriter, dotting machine, and distraction machine, is affected not only by the absolute concentration of alcohol, but also by the rate and direction of its change. The degree of nervous disturbance at any given blood alcohol concentration is greater if the concentration is increasing than if it is decreasing, and it increases with the rate at which the concentration is increasing. The rapid recovery of the nervous system accompanying a decrease of blood alcohol concentration is impeded if the rate of decrease is reduced. The application of a single test at a given time after a dose of alcohol is, therefore, not likely to yield accurate information as to the magnitude of its effect on the subject. A test repeated every 10 min. during the hour following the dose of alcohol, or until recovery is complete, is advisable in all cases where the result is of practical importance.—*M. D. Vernon* (Cambridge).

4612. Ferraz Alvim, J. Estudo sobre a psicologia normal e patológica da emoção. (A study of the normal and pathological psychology of emotion.) *Rev. Neurol. Psiquiat. S. Paulo*, 1941, 7, 119-129.—The author reviews the various theories of emotion. The importance of pathological emotions (hyperemotional constitution, dissociation) is that, on their basis, secondary factors may evoke anxiety neuroses or psychoses, which, in turn, are the sources of various delusional formations.—M. E. Morse (Baltimore, Md.).

4613. Finch, G. Chimpanzee handedness. *Science*, 1941, 94, 117-118.—30 chimpanzees were each given 4 tests for handedness until each had been tested 800 times. The test situations precluded the use of any member other than one hand. 18 animals showed handedness (9 right, 9 left) in more than 90% of the trials and 25 (11 right, 14 left) in more than 80%.—F. A. Mote, Jr. (Connecticut).

4614. Gemmill, C. L. Acclimation to high altitudes. *Nat. med. Bull., Wash.*, 1941, 39, 178-187.—This is a review of physiological observations on man in regard to respiratory and circulatory changes following acclimatization to high altitudes. One experimenter, using a dynamometer to standardize exercise, found that the work curve was a straight line and that the basal pulse rate curve did not rise until heights over 15,000 feet were reached.—J. E. Zerga (Los Angeles, Calif.).

4615. Goldfarb, W. An investigation of reaction time in older adults, and its relationship to certain observed mental test patterns. *Teach. Coll. Contr. Educ.*, 1941, No. 831. Pp. viii + 76.—19 tests, including 3 simple and discriminative reaction time tests, 3 speed tests of intelligence, the Otis Self-Administering Test of Mental Ability, the CAVD, and the 11 Wechsler-Bellevue Intelligence Tests, were administered to 108 men and 60 women ranging in age from 18 to 65. A high relationship was found between simple and discriminative reaction time in older adults. Variability in reaction time increases with age in men. Speed of reaction declines with increasing age for both groups. Power tests in which speed is no factor show no decline with age, and the greater the speed factor the greater the decline in mental test scores with age. The author concludes that intelligence is not a unitary trait. Tests measuring the different factors in adult intelligence should be considered separately rather than as a combined score, since age affects the relative contribution of the various factors. Bibliography of 35 titles.—L. Birdsall (Coll. Ent. Exam. Board).

4616. Herzog, G. Do animals have music? *Bull. Amer. Musicol. Soc.*, 1941, 5, 3-4.—Animal songs are divided into seasonal singing (mating calls) and subsong which "is uttered indiscriminately by females or birds of the year as well as by males assembled in winter flocks when singing in chorus."—P. R. Farnsworth (Stanford).

4617. Himmelsbach, C. K., Gerlach, G. H., & Stanton, E. J. A method for testing addiction,

tolerance and abstinence in the rat; results of its application to several morphine alkaloids. *J. Pharmacol.*, 1935, 53, No. 2. Pp. 10.—The irritability of white rats was measured by recording struggle responses made by the animals while lashed in the supine position to a small board. Measurements were made over a period of 5-6 weeks during which the animals received daily injections of morphine, heroine, or codeine, and on alternate days for a period of 9-13 days after permanent withdrawal. The animals showed "definite and increasing pre-injection irritability; incomplete post-injection tranquilization during the addiction period, but almost complete in the case of heroine; and gradual decrease to normal irritability during the first seven to ten days of permanent abstinence." Daily injections of water in control animals caused no such effects. The results are interpreted as indicating the presence of addiction and tolerance. The tolerance here measured is a summation of at least 2 actions: "suppression of discomfort and the production of a cataleptic state."—C. N. Cofer (George Washington).

4618. Huntsman, A. G. "Spawning urge," "homing instinct" and "waiting" in salmon return. *Nature, Lond.*, 1938, 141, 421-422.—This is a summary of 4 experiments reported elsewhere. There is no agreement between sexual maturity and entrance into rivers. Salmon remain within the vicinity of their native rivers, and marked fish have been observed to go up rivers other than their own at spawning time. Experiments under different conditions of turbulence of the surrounding water indicate a fairly simple explanation for the phenomenon of salmon "waiting" until conditions in the rivers are favorable for ascent.—N. R. Bartlett (Brown).

4619. Jennings, H. S. The beginnings of social behavior in unicellular organisms. Philadelphia: Univ. Pennsylvania Press, 1941. Pp. 17. \$0.25.—This is a discussion of the complexities of reproduction in *Paramecium bursaria*. A population of infusoria contains "young immature individuals, adolescents in various grades of development, possibly aged, senile individuals, and mature individuals." Among the mature individuals appear representatives of several diverse mating types. Behavior is described "of a type that tempts one to characterize it as the objective aspect of courting, or perhaps in some cases flirting."—N. R. Bartlett (Brown).

4620. King, C. G., Karn, H. W., & Patton, R. A. Nutritional deficiency as a factor in the abnormal behavior of experimental animals. *Science*, 1941, 94, 186.—Experiments on albino rats involving both inanition and vitamin B-complex deficiency show that both induce sensitivity to the epileptoid seizures which characterize the rat's response to auditory stimulation. "Specific members of the vitamin B-complex, particularly thiamin (B₁), can effect significant protection at intake levels above those required for growth and reproduction. Paired feed-

ing experiments have been used to avoid possible errors caused by inanition, and although the latter is clearly an important factor in the susceptibility to seizures, pure vitamin supplements and empirical concentrates such as provided by yeast exert an effect in addition to that afforded by pure thiamin."

F. A. Mote, Jr. (Connecticut).

4621. Konikov, A. L. [Effect of stimulation of the gustatory receptor on the level of motor chronaxy in man.] *Byull eksp. Biol. Med.*, 1941, 11, 364-367.

4622. Mack, P. B., & Sanders, A. P. The vitamin A status of families in widely different economic levels. *Amer. J. med. Sci.*, 1940, 199, 686 ff.—(*Child Developm. Abstr.* XV: 577).

4623. Macmillan, J. W. Eye-movements and attention. *Amer. J. Psychol.*, 1941, 54, 374-384.—The stimulus-objects were 2 circular light areas, with a fixation-point between them. Eye-movements were photographed upon infra-red sensitive film, by reflecting a beam of infra-red light from the cornea. 3 O's served. The stimulus-areas were presented for 60 ms. O was required to report which area appeared clearer; the method of limits was used. A control series was run in which O was instructed to report on the more 'intense' area. The correlation between eye-movements and attention was practically zero.—D. E. Johannsen (Skidmore).

4624. Mira, E. Análisis estructural del miedo. (Structural analysis of fear.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 391-407.—The basis of fear is the biological law of inhibition. Fear is progressive inefficiency, insecurity, inability to react, and ego contraction and impoverishment. Its origin is not recognition of danger but failure of adequate reaction to it. In the pathological field it is illustrated by expectation neurosis or the panphobia of vital depression. Mira's theory diverges from that of Cannon, who did not produce a true phobogenic situation (e.g. hurling the dogs unexpectedly into space) but only an "emotional cocktail." The antidote to fear is not courage or withdrawal into self but putting the person in control of himself and, passing through the stage of self-affirmation, enthusiasm and faith in his action. Its highest form is transcendence of self, i.e. love. Courage is only a way station to serenity or peace with self.—M. E. Morse (Baltimore, Md.).

4625. Müller, L. R. Über den Schlaf. Studien über die Ermüdung, über den Schlaf, über Erholung, über Schlafstörungen und über deren Behandlung. (About Sleep. Studies about fatigue, about sleep, about recovery, about sleep disturbances, and about their treatment.) Munich, Berlin: J. F. Lehmann, 1940. Pp. 146.—[Abstracted review; original not seen.] The writer calls this theoretical discussion the final stone in the structure of his life's work on the development and function of the nervous system. During sleep there is a storage of potential energy which depends upon enrichment of the calcium group content of the cells, including the nerve cells, while the blood serum is storing material of the sodium group. From this hypothesis the

author evolves an explanation of the function of sleep and treatment of various problems concerning sleep. Bibliography of 108 papers by the writer with other references in the main portion of the text.—N. J. F. Van Steenberg (National Youth Administration).

4626. Nylund, C. E., & With, T. K. [Demonstration of vitamin A deficiency in man.] *Acta med. scand.*, 1941, 106, 202-228.—(*Child Developm. Abstr.* XV: 583).

4627. Pizarro Crespo, E., & Pedrani, A. Las enfermedades del "desperter" y la patología "a frigore." (Ailments appearing on awakening and the pathology of "cold.") *Dia méd., B. Aires*, 1940, 9, Nos. 11 & 12.—[Abstracted review; original not seen.] According to biological considerations and psychoanalysis of dreams, many ailments (especially nervous ones) are attributed to "cold." Practical psychology has taught that almost all of these have a definite psychogenic determination and are only expressions of mental processes developing during sleep. Every symptom appearing on awakening or during sleep is determined exclusively or preponderantly by psychic processes or tensions mobilized during sleep and translated through dreams, accompanied by organic reactions. These are "pathogenic dreams."—M. E. Morse (Baltimore, Md.).

4628. Pletnev, A. V., & Potapova, I. T. [Hunger, appetite, and satiation (food reflexes and food behavior).] *Byull eksp. Biol. Med.*, 1941, 11, 211-214.

4629. Prokopenko, V. G. [Content of acetylcholin in the blood in conditioned and unconditioned alimentary excitation.] *Byull. eksp. Biol. Med.*, 1941, 11, 326.

4630. Promptov, A. N. [Contemporary state of the problem of nest parasitism of birds.] *Usp. sovrem. Biol.*, 1941, 14, 30-51.

4631. Rife, D. C. Palm patterns and handedness. *Science*, 1941, 94, 187.—Investigation of the handedness and palmar dermatoglyphics within 348 paired siblings of 26 families reveals an association between pattern D in the 4th interdigital area and functional handedness. 145 pairs are concordant in handedness and pattern D; 64 pairs concordant in handedness, discordant in D; 68 pairs discordant in handedness, concordant in D; and 71 discordant in both. After analyzing these data a Chi-square value of 14.8 is obtained showing that siblings are much more likely to be alike or unlike in both traits than they are to be alike in one and unlike in the other.—F. A. Mote, Jr. (Connecticut).

4632. Robinson, S., & Harmon, P. M. The effects of training and of gelatin upon certain factors which limit muscular work. *Amer. J. Physiol.*, 1941, 133, 161-169.—9 college men, ages 18-22, were trained for running over a period of 26 weeks. 6 subjects took 60 gr. of gelatin a day from the 9th through the 15th week of training, and 3 subjects took the same amount of gelatin from the 15th week through the 21st week. Performances in 5 track races ranging in distance from 250 yards to 1½ miles

indicated consistent improvement during training, but there were no differences in favor of the gelatin periods.—*R. T. Sollenberger* (Mount Holyoke).

4633. Silivanik, K. E. [Correlation of the central and peripheral factors in the locomotor function of the axolotl.] *Byull. eksp. Biol. Med.*, 1941, 11, 23-26.

4634. Souvid, U. G. [The cerebral cortex and sweat secretion.] *Sovetsk. Psikhonevrol.*, 1940, No. 2.—[Abstracted review; original not seen.] In an attempt to investigate the role of the cerebral cortex in sweat secretion and the localization of this function the author studied 34 patients with the motor type of Jacksonian epilepsy, 10 patients with the sensory type, and 7 cases with generalized convulsions. 24 normal individuals formed a control group. All subjects were covered with cobalt and given 1 gr. of aspirin 10 minutes prior to being exposed to a light bath of 50° C. In the motor type of Jacksonian epilepsy the sweat secretion begins earlier and is more intensive on the affected than on the unaffected side, in contrast to the sensory type and the control group where the secretion tends to be simultaneous and equal. From this and other observations the author concludes that there is a type of localization for the sweat secretion in the motor area of the cortex similar to the type of motor localization.—*M. Keller* (Butler Hospital).

[See also abstracts 4512, 4518, 4521, 4522, 4523, 4524, 4553, 4581, 4594, 4598, 4649, 4661, 4670, 4678, 4685, 4747, 4779, 4793, 4826, 4862.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

4635. [Anon.] Scientific tests of a vaudeville telepathist. *Nature, Lond.*, 1938, 141, 565-566.—This is a brief account of a detailed study showing that the "telepathy" and "clairvoyance" of a certain medium depend upon a hyperacuity of the senses.—*N. R. Barilett* (Brown).

4636. Buxbaum, E. The rôle of detective stories in a child analysis. *Psychoanal. Quart.*, 1941, 10, 373-381.—During the analysis of a 12 year old boy suffering from fears, 6 months were spent in the analysis of his compulsion to read detective stories. This was divided into 3 phases: (1) identification with the victim, the manifest content of the child's fear; (2) identification with the criminal, with aggression directed outward and with fear of vengeance by the victims; and (3) identification with the detective which abolished the child's fear. Thus, the detective served as a defense against instincts, while the victim and the criminal served to express wishes. Hence, the compulsion was a form of defense against fear and constituted a neurotic symptom.—*M. H. Erickson* (Eloise Hospital).

4637. Erickson, E. M. Critical comments on Hibler's presentation of his work on negative afterimages of hypnotically induced hallucinated colors. *J. exp. Psychol.*, 1941, 29, 164-170.—Hibler (see XIV: 4903) failed to confirm the finding of Erickson and Erickson (see XII: 5274), who in 1938 reported

that under hypnosis subjects naive in regard to color phenomena hallucinate appropriate negative afterimages. He suggested that these hypnotic hallucinations are probably basically verbal rather than sensory or cerebral. The present paper contains Mrs. Erickson's criticisms of Hibler's negative findings, chief of which is his use of an inadequate technique, requiring less than 15 to 30 minutes for the induction. She also points out that Hibler's subjects were sophisticated in regard to the nature of afterimages, although 1 of the 4 subjects expected positive afterimages under conditions in which negative afterimages are to be expected.—*M. J. Zigler* (Wellesley).

4638. Greig, A. B. A child analysis. *Psychoanal. Quart.*, 1941, 10, 395-430.—From the detailed report of the clinical course and developments of a therapeutically effective analysis of a 9 year old boy, the author concludes that child analysis does not differ materially from adult analysis. 4 factors illustrated by the case material and which are significant in the analytical relationship and applicable in everyday child-adult relationships may be listed. (1) The recollection of events without affect is common to psychotic patients and normal children but is readily given up by the latter. (2) Freedom of action with guidance only and without unnecessary help or insistence upon rules of technique is essential to the child in adult and analytic relationships. (3) The free use of humor makes possible the approach to new material and reduces fear and tension for both analyst and patient. (4) The analyst, unlike a parent or educator who supervises and demands, serves as a protector and a permissive agent in the living out of fantasies.—*M. H. Erickson* (Eloise Hospital).

4639. Hibler, F. W. Note on Mrs. Erickson's comments on Hibler's work on negative afterimages of hypnotically induced hallucinated colors. *J. exp. Psychol.*, 1941, 29, 170-173.—Hibler's response to Mrs. Erickson's critique (see XV: 4637) chiefly concerns the need for further research to secure objective criteria by which the deep hypnotic trance is to be distinguished from the trances which commonly are induced by many workers in the field.—*M. J. Zigler* (Wellesley).

4640. Isaac-Edersheim, E. Messias, Golem, Ahasver; drei mythische Gestalten des Judentums. I. Der Messias. (Messiah, Golem, Ahasver; three mythical figures of Judaism. I. The Messiah.) *Int. Z. Psychoanal. Imago*, 1941, 26, 50-80.—The Messiah concept is traced through different interpretations with special emphasis on Hebrew mythology. The word means "anointed" and points to the desire to appropriate by means of the proper rituals the power of God the father after killing him. It involves the original solution of the Oedipus situation. Many other characteristic attitudes toward the father combine to create the Messiah figure: respect, fear, longing, guilt. Thus he becomes the resurrected son of the King, yet also the King himself, equipped with divine power, and the

hero who performs the revolutionary miracle. The Christians made such a hero out of Jesus, while the Jews still await their Messiah. He will come as an unknown, when the time is ripe—which explains why some orthodox Jews will not attempt to alleviate the suffering of their people: that must await the Messiah's coming.—*H. Beaumont* (Kentucky).

4641. Kiewiet de Jonge, A. J. *Quelques principes de psychosynthèse*. (Some principles of psychosynthesis.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 241 ff.—[Abstracted review; original not seen.] Psychoanalysis alone neither shapes nor alters a personality. Psychological synthesis, based on the individual's social needs, must follow the analytic process if the person is to acquire or regain an effective personality.—*H. Beaumont* (Kentucky).

4642. Monchy, S. J. R. de. *De psychoanalyse in de puberteit*. (Psychoanalysis in puberty.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 888 ff.—[Abstracted review; original not seen.], The author contrasts normal and deviating types of development during puberty. He distinguishes between neglect resulting from too little affection and that due to an overdose. The analytic technique is a mixture of the methods used with adults and children and involves some pedagogy as well.—*H. Beaumont* (Kentucky).

4643. Pailthorpe, G. W. *Deflection of energy, as a result of birth trauma, and its bearing upon character formation*. *Psychoanal. Rev.*, 1941, 28, 305-326.—The energy of an infant is regulated and deflected by the incidents of birth. This is illustrated by the case of a young man who felt that he could not use his great capacity to the fullest extent. A new psychoanalytical technique employing graphic media revealed that as an infant he had sought to suppress or control anger, crying, urination, and breathing because he regarded the pains of birth and circumcision as punishment for these activities. This led in adulthood to avoidance of situations which might lead to thwarting, argument, and hostility.—*G. Brighouse* (Occidental).

4644. Peerbolte, M. L. *Psychoanalysis and parapsychology*. *Psychiat. neurol. Bl., Amst.*, 1938, 42, 632 ff.—[Abstracted review; original not seen.] Some parapsychological phenomena, especially telepathy, are apparently related to neurotic conflicts. There is a cosmic libido which brings about occult manifestations whenever the personal libido is thwarted. Thus, telepathic dreams may result from ungratified desires, especially when intensified incestuous wishes magnify the castration complex.—*H. Beaumont* (Kentucky).

4645. Sadger, J. *Preliminary study of the psychic life of the fetus and the primary germ*. *Psychoanal. Rev.*, 1941, 28, 327-358.—Patients whose analyses are traced back only to early childhood may show apparent cures but will later suffer relapses. Thus it is essential to go deeper, to birth or even to the time of fertilization. Spermatozoon, ovum, and embryo can experience pleasure and pain and can be aware of attitudes of acceptance and rejection by

both parents. These very early experiences give the clue to the complete understanding of hysteria and the sexual perversions.—*G. Brighouse* (Occidental).

4646. Šugar, N. *Zur Frage der mimischen Bejahung und Verneinung*. (The question of mimical affirmation and negation.) *Int. Z. Psychoanal. Imago*, 1941, 26, 81-83.—Psychoanalytic authors have associated vertical head movements with affirmation either because of their relation to chewing or, through displacement, to the coitus. The fact that in some areas the reverse gestures prevail (horizontal head movements for affirmation, vertical ones for negation) suggests a parallel to Freud's concept of reverse words: in many languages the meaning as well as the sound of words have become the opposite of the originals.—*H. Beaumont* (Kentucky).

4647. Šugar, N. *Zur Frage der unbewussten Verständigung und der "ansteckenden" Fehlhandlung*. (The question of unconscious rapport and "communicable" mistakes.) *Int. Z. Psychoanal. Imago*, 1941, 26, 84-87.—2 examples are given to illustrate the fact that the unconscious of one person may be in direct rapport with that of another. The 2 persons may react to each other or identify themselves with each other without conscious awareness of one another. One unconscious may cause another to make a mistake, so that the second unconscious in effect becomes the executive organ of the first.—*H. Beaumont* (Kentucky).

4648. Vogel, V. H. *Clinical studies of drug addiction. IV. Suggestibility in narcotic addicts*. *Publ. Hlth Rep.*, 1937, Suppl. No. 132. Pp. 7.—200 adult white males addicted to the use of opium, morphine, or heroin were tested for suggestibility with the Hull postural sway technique. 3 groups were considered: (1) 40 men dependent on and under an opiate's influence at the time of testing; (2) 60 men from whom the drug had been withdrawn not more than 60 days before the testing; (3) 100 men whose average time since withdrawal was 18 months. 100 non-addicts served as controls. Group 1 showed a significant preponderance of positive responses as compared with the controls. There seemed to be no clear-cut difference between groups 2 and 3 and the controls. Thus, during addiction, the subjects showed hypersuggestibility, but this decreased during withdrawal. 23 of the subjects in group 1 were retested 30 days later (withdrawal having occurred in the intervening period) and showed a decrease in suggestibility. Addicts are probably no more suggestible before addiction than are non-addicts.—*C. N. Cofer* (George Washington).

4649. Wilbur, G. B. *Some problems presented by Freud's life-death instinct theory*. *Amer. Imago*, 1941, 2, 134-196.—The question is raised as to whether or not a logical circularity has developed in the structure of Freud's life-death instinct theory, which was originally advanced tentatively and with reluctance. The nature of the emotional response stirred up by the theory is compared with some analogous events in the history of mathematics.

Occasion is taken to review some characteristic features of the process of theorizing. The modern conception of the "tendency to maintain stability" as a characteristic of living organisms is examined to see whether a concept of a death instinct is implicitly contained therein. Various examples of systems in a steady state are given. There is an opposition of internal and external forces with reactions proceeding faster in one direction than in another. In physics and in biology there are "indications of a duality consisting on the one hand of a persistent form which maintains itself only under difficulties and limitations, on the other of a mere formlessness." Death may be a return to the formless, but the formless can be known only by contrast with a form.—*W. A. Varvel* (Texas A. & M.).

[See also abstracts 4490, 4627, 4714, 4730, 4748, 4762, 4814, 4819, 4834, 4837, 4851.]

FUNCTIONAL DISORDERS

4650. Aita, J. A. The problem of neurologic and psychiatric examination during military mobilization. *Proc. Mayo Clin.*, 1941, 16, 283-287; 294-298; 307-313.—Neurologists, institutional physicians, and psychoanalysts are not qualified, without further training, to make the necessary quick and practical evaluation of borderline cases. Even after the gross disabilities have been eliminated by local boards, the neuropsychiatrist may have to pass on 50-80 men a day. The experienced examiner can do this efficiently through 5-10 minutes of well-organized observation per man. The purpose is evaluation of the psychosomatic whole at all integrated levels, the discovery not of isolated symptoms but of syndromes and longstanding or residual conditions. A guide for minimal psychiatric examination is presented with directions for use. The questions are compact, all-inclusive, and in the current vernacular; and the approach is friendly but serious.—*M. E. Morse* (Baltimore, Md.).

4651. Alexander, R. Graphomania and its equivalents. *Med. Rec., N. Y.*, 1941, 154, 108-110.—The graphomania, exhibited by committed mentally ill patients, has its direct or transposed counterpart in the excesses shown in the writings, musical compositions, or the paintings done by famous people of the past. Among those mentioned are Rousseau, Wilde, Swift, MacDowell, Swedenborg, and Savonarola. Brief discussion is offered of this type manifestation, and the author concludes with a mention of the Winchester Mystery House of San Jose, California, which constituted an architectural monstrosity.—*M. H. Erickson* (Eloise Hospital).

4652. Allen, C. The present position of psychotherapy. *Med. Pr.*, 1941, 205, 234-237.—"The physical and the psychical are so interrelated that to treat one without the other almost invariably leads to misconception." Exophthalmic goitre, gastric ulcers, muco-membranous colitis, and some cardiac irregularities often result from emotional disturbances. Patients suffering from chiefly environmental

problems (simple anxiety states, some phobias, and the lesser sexual neuroses) may show improvement after superficial psychotherapy while others suffering from fundamental personal defects (hysteria, obsessions, mild psychoses, and homosexuality) require prolonged or deep therapy.—*D. Miller* (U. S. Employment Service).

4653. Altshuler, I. M. The part of music in resocialization of mental patients. *Occup. Ther.*, 1941, 20, 75-86.—Music, in addition to possessing educational, cultural, and esthetic attributes, has the following therapeutic properties for mental patients: (1) the capacity to produce metabolic, respiratory, blood pressure, pulse, endocrine, and muscular energy changes; (2) the ability to command, and increase the span of, attention; (3) the power of diversion and substitution, such as, the replacing of morbid states with wholesome feelings and ideas; (4) the capacity to modify the mood of the patients; and (5) the capacity to stimulate the patient both pictorially and intellectually.—*J. E. Zerga* (Los Angeles, Calif.).

4654. Anderson, E. W., & Mallinson, W. P. Psychogenic episodes in the course of major psychoses. *J. ment. Sci.*, 1941, 87, 383-396.—Described are 3 cases of major psychosis, 2 depressions and 1 schizophrenia, in which psychogenic episodes similar to those described by Ganzer occurred. No diagnostic difference between catatonic *vorbeireden* and the hysterical was found. The tendency to develop this type of thought disorder in Ganzer states may indicate an affinity with the schizophrenic *Anlage*.—*W. L. Wilkins* (Milwaukee, Wis.).

4655. [Anon.] Wie alt werden die unheilbaren Geisteskranken? Eine erstmalige statistische Untersuchung. (How old do the incurable insane become? A first statistical investigation.) *Arztebl., Hessen*, 1940, 8, 338-340.—[Abstracted review; original not seen.] Vital statistics from 1930 to 1939 for 1379 cases of incurable insanity reveal the average age at death to be 56.5 years compared with the life expectancy of 60 for men and 63 for women in a normal population. The life expectancy for the senile is 74 years, for manic-depressives between 61 and 70, for alcoholics 63, for the psychopathic 58, for paretics 51, for cases with organic nervous disease 49, for schizophrenics 47, and for epileptics between 20 and 25. It is concluded that man, exposed to the struggle for existence under normal living conditions, becomes hardy and lives longer than the weak and sickly even though they are cared for in institutions.—*I. J. Elinson* (Adjutant General's Office).

4656. [Anon.] Miner's nystagmus. *Lancet*, 1940, 238, 468-470.—"It is generally agreed that oscillation is due to working in an illumination below that necessary for central vision, the retinal periphery carrying the whole retinal function. In conflict with this, however, is the fact that a nervous condition associated with nystagmus has been described in two occupations remote from coal mining: in maritime crane workers in Genoa, and train dis-

patchers in America. . . . All three of the occupations concerned involve constant visual stress associated with the knowledge of danger. All the signs and symptoms of miner's nystagmus are typical of psychogenic disorder except the oscillation itself, . . . and the disability from the oscillation, however it comes about, behaves as a hysterical symptom. Like hysterical tremor or paralysis, as long as it lasts it protects the patient from further symptoms. . . ."—C. K. Trueblood (Cambridge, Mass.).

4657. **Baastrup, C. I. Automonosexualisme med naale.** (Autosexuality with needles.) *Ugeskr. Laeg.*, 1940, 102, 1064-1065, 1120.—The roentgenogram of a 41 year old man revealed over 40 needles in and about the genitalia. The needles were inserted as a result of a sexual urge. This serves as an introduction to a much older case of a woman who, over a period of 3 years, had numerous operations to have in all 389 needles removed from genitalia (principally) and from mammae. 2 further, similar cases are briefly described.—N. J. F. Van Steenberg (National Youth Administration).

4658. **Banister, H., & Zangwill, O. L. Experimentally induced visual paramnesias.** *Brit. J. Psychol.*, 1941, 32, 30-51.—Illustrations are given of restricted paramnesias set up in response to material for which post-hypnotic amnesia had been induced. These responses are strikingly similar to paramnesia in daily life. 3 moments can usually be distinguished in the paramnesic response: (1) an initial judgment of reference to the past, (2) a phase of perplexity marking an effort at recall, (3) an act of rationalization often wholly constructive in character. Rationalization took various forms, one of the most common of these being a projection of the paramnesia on to material previously seen in the waking state. Fabulation was prominent in the responses of one subject. The results provide some evidence in support of MacCurdy's theory of paramnesia, but throw little light on the origin of *déjà vu*.—M. D. Vernon (Cambridge).

4659. **Bierer, J., & Haldane, F. P. A self-governed patients' social club in a public mental hospital.** *J. ment. Sci.*, 1941, 87, 419-426.—A social club, meeting thrice weekly, directed by patients under a psychotherapist's supervision, has facilitated the development of sociability in many cases.—W. L. Wilkins (Milwaukee, Wis.).

4660. **Blanton, S., & Peale, N. V. Faith is the answer.** Nashville, Tenn.: Abingdon-Cokesbury, 1940. Pp. 223. \$2.00.—In this book a psychiatrist and a pastor have collaborated to offer solutions to the common personal problems of normal individuals. In the first half of each chapter Blanton discusses some problem from the psychiatrist's point of view, illustrating his points with numerous case histories. In the last half of the chapter, Peal describes how the practice of religious faith helps to solve the problems under discussion, using stories from his own experience as illustrations.—J. McV. Hunt (Brown).

4661. **Bleuler, M. Krankheitsverlauf, Persönlichkeit und Verwandtschaft Schizophrener und ihre gegenseitigen Beziehungen.** (Clinical course, personality, and relatives of schizophrenics and their mutual connections.) Leipzig: Thieme, 1941. Pp. 149. RM 12.—[Abstracted review; original not seen.] A study was made of 316 hospitalized schizophrenics and their 11,410 relatives and of 2 paranoid patients with 174 relatives. 2490 individuals of the average population were used as controls. It was found that the disease expectancy for siblings of schizophrenics was about 12%. For cousins, uncles, aunts, and grandparents of schizophrenics the incidence of schizophrenia was about twice as high as among the controls. This is considered evidence in favor of sterilization of these patients.—M. Keller (Butler Hospital).

4662. **Braatøy, T. Sorger og sinnslidelser.** (Worries and mental disorders.) Oslo, 1938, 2 Vol.—[Abstracted review; original not seen.] These 2 volumes are the outgrowth of a series of lectures for nurses. The author presents a non-technical discussion of medical psychology and psychiatry in order to provide a practical basis on which hospital employees may deal with their patients. Included are chapters on nervous symptoms, character development, schizophrenia, melancholia and suicide, organic disorders, and the relation between age and illness.—H. Beaumont (Kentucky).

4663. **Carp, E. A. D. E. Psychoanalyse en gesichtspsychiatrie.** (Psychoanalysis and institutional psychiatry.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 169 ff.—[Abstracted review; original not seen.] Inability to grasp and experience reality is the basic characteristic of all psychotic conditions. A psychosis involves both the disruption of the patient's relationship to reality and its reorganization. The latter should be reinforced by psychotherapy. The purpose of modern treatment, such as shock therapy, is to put the patient in an infantile position of dependency, offer him desirable opportunities for identification, and make the world around him appear as tempting as possible in order to aid him in finding his way back to reality.—H. Beaumont (Kentucky).

4664. **Dunlap, K. Research in methods of adjustment.** Berkeley, Calif.: Univ. California Press, 1941. Pp. 23. \$0.25.—This is a faculty research lecture delivered in 1939 at the University of California at Los Angeles. It is a general discussion of the methods and techniques involved in the studies of maladjustment and readjustment in which the author has been engaged during the last 3 years. The techniques are non-experimental and non-quantitative. The procedure is "within the broad field of 'case work'."—S. G. Dulsky (Rochester Guidance Center).

4665. **Faber, K. Synaalejomfruens mentalitet.** (The mentality of the girl with the needles.) *Ugeskr. Laeg.*, 1940, 102, 1097.—One of Baastrup's cases of sexual satisfaction obtained by the insertion of needles (see XV: 4657) was complicated by a

hemianesthesia, since the great majority of the needles were inserted in the right side.—*N. J. F. Van Steenberg* (National Youth Administration).

4666. Feith, R. H., & Stokvis, B. **Het schizophrène denken en de Kabbalah.** (Schizophrenic thinking and cabala.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 212.—[Abstracted review; original not seen.] Schizophrenic language and cabalistic mysticism show a close relationship, especially in their treatment of words. However, in the latter, illusions are not present.—*H. Beaumont* (Kentucky).

4667. Foster, G. R. **The use of intelligence tests in the diagnosis of psychotic patients.** *J. Maine med. Ass.*, 1940, 31, 321-324.—The nature of their disorders prevents most psychotics from making use of the intelligence they possess. They are most inefficient in response to complex questions requiring accuracy of thought (e.g. arithmetic reasoning). In the testing situation a subjective approach involving careful interpretation of all utterances may reveal self-confidence, adaptability, distractibility, and changes of mood. Using a test of range of information, the writer established rapport and gained cooperation from deteriorated dementia praecox patients.—*D. Miller* (U. S. Employment Service).

4668. Gorriti, F. **Psicopatología; infinidad existencial.** (Psychopathology; existential infinity.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 499-507.—The idea of infinity cannot be apprehended logically but may be approached through personality. Gorriti reviews his attempts to illuminate some metaphysical questions (the nature of mind, religion, etc.). The idea of infinity in normal and abnormal psychology arises subjectively from internal or external factors which adequately stimulate the highest intellectual functions. Reports of 2 patients are given. The first had complete appreciation of his immediate life, combined with delusions of interminable illness and decay, leaving only interminable consciousness and anxiety. The second felt himself, at intervals, instantaneously transported from the present to infinite space and eternal life. These ideas, arising when ideational processes disintegrate, originate in disturbed cenesthesia.—*M. E. Morse* (Baltimore, Md.).

4669. Green, I. **Neuropsychiatric rejects under the selective service act.** *Med. Rec., N. Y.*, 1941, 154, 95-96.—The author discusses briefly the present physical examination standards for the selective service. He relates his personal experience and summarizes with the statement that on the basis of neuropsychiatric examinations 59 selectees out of 799, or 7.4%, were recommended for rejection. The largest percentages of rejections were for psychopathic personality, mental deficiency, psychoneurosis, and schizophrenia. The percentage of rejections compares favorably with the experience during the world war.—*M. H. Erickson* (Eloise Hospital).

4670. Guttman, E., & Mayer-Gross, W. **Anxiety and the heart.** *Lancet*, 1940, 238, 979-980.—Anxiety is defined as "a condition of agitation and

depression with a sensation of tightness and distress in the precordial region. . . . The whole of the anxiety-reaction is integrated by the vegetative-endocrine system, and can be set going by any of its components. . . . As regards the subjective sensory experiences characterizing anxiety . . . the precordial sensations are the most important . . . but the subjective experience of cardiac disease cannot be understood in the light of these sensations alone; they must be viewed against the background of popular ideas about the significance of the heart in human life. . . . Every psychological approach to 'heart neurosis' . . . must begin with the patient's perception and self-observation of the cardiac region and action. There are several ways in which this may become the centre of a neurosis: (1) by sudden emotional shock, as in anxiety during a traffic accident . . . ; (2) in chronic emotional stress, as, business difficulties, marriage conflict . . . ; (3) in an already abnormal psychological state,—a depression or an obsessional illness . . . ; (4a) in sensitive persons liable to emotional upsets which render them limp . . . ; (4b) in persons who crave emotions . . . ; (5) in heart patients who keep an anxious watch over their cardiac action. . . ."—*C. K. Trueblood* (Cambridge, Mass.).

4671. Guttman, E., & Rimoldi, H. **Fatigue and the effort syndrome.** *J. ment. Sci.*, 1941, 87, 349-358.—Mosso's ergograph was used to test fatigue in cases of the effort syndrome. Marked differences in tempo between right and left hand and slow, short, and abruptly ending curves point to a tendency for hysterical (escape) reactions. Fast, long, and irregular curves point to anxiety. Cases with true exhaustion, constitutionally weak persons, as well as convalescents from toxic-infectious conditions also show fast and long curves, but such are more regular and lower and frequently show final effort.—*W. L. Wilkins* (Milwaukee, Wis.).

4672. Hasenjaeger, T., & Pötzl, O. **Phantomarm bei Plexuslähmung.** (Phantom arm in plexus paralysis.) *Dtsch. Z. Nervenheilk.*, 1941, 152, 112-132.—This is apparently the second report of phantom arm following trauma to the brachial plexus. The phantom, in which there was no feeling of movement, could not be made to coincide with the paralyzed arm. The authors explain phantom limbs, both after amputation and in connection with central or peripheral lesions, as dissociations in the body schema, psychological rather than physiological, and lying on the borderland of agnosia and apraxia. Integrity of the central processes, thalamic and parietal, is necessary for the concept of the body schema. In phantoms, this is dissociated into a tactile and kinesthetic and a visual component, projected externally, representing only the local signs of external space, and depersonalized. These components cannot be united into a feeling of function. The present case substantiates the kinesthetic, tactile, and visual make-up of the body schema. It also shows a harmonizing process analogous to fusion in binocular vision. There may also be a similarity between the regeneration of

mangled limbs in the lower animals, regulation of embryonic growth, and the regenerative tendency of the body schema.—*M. E. Morse* (Baltimore, Md.).

4673. **Herriott, F., & Hagan, M.** The theatre for psychodrama at St. Elizabeth's Hospital. *Sociometry*, 1941, 4, 168-176.—A description (with photographs) of the theater, and of the special problems of personnel and technique to be met with in taking the psychodrama away from Beacon Hill, into a large institution.—*L. J. Stone* (Vassar).

4674. **Hershey, L. B.** [Ed.] A minimum psychiatric inspection of registrants. *Med. Circ. select. Serv. Syst.*, Wash., 1941, No. 1. (Rev.) Pp. 9. Also *J. Amer. med. Ass.*, 1941, 116, 2059-2061.—This inspection "revises the original plan offered Selective Service Headquarters by the William Alanson White Psychiatric Foundation [see XV: 1917], to conform with War Department, Surgeon General's Office Circular Letter No. 19, March 12, 1941 [see XV: 4696]."—*H. L. Ansbacher* (Brown).

4675. **Hodgskin, P. T.** Group catharsis with special emphasis upon psychopathology of money. *Sociometry*, 1941, 4, 184-192.—This is the description of a schizophrenic patient's psychodramatic session, with the interpretation that he used money as a power symbol to mitigate unbearable emotional isolation. The effect of the session on the audience (other patients) is analyzed in terms of the extent of the realization of their own or family sacrifice of money and other values for their treatment.—*L. J. Stone* (Vassar).

4676. **Horn, W.** Untersuchungen und Beobachtungen an geisteskranken Juden. (Studies and observations on psychotic Jews.) *Allg. Z. Psychiat.*, 1941, 117, 167-180.—This is a statistical study of 320 Jewish patients at the Werneck Institution between 1855 and 1940. Schizophrenia (the paranoid form predominating) and manic-depressive insanity were the chief conditions represented. The former appeared to be somewhat less frequent and the latter more frequent than among the Gentile patients.—*M. E. Morse* (Baltimore, Md.).

4677. **Kujath, G.** Generativer Mechanismus und Persönlichkeit bei den Schizophrenen. (Generative mechanism and personality in schizophrenics.) *Allg. Z. Psychiat.*, 1941, 117, 181-221.—This is a genetic and phenomenological study of the prepsychotic sex life and psychotic sex experiences of 225 male and female schizophrenics. In the typical unfavorable cases the mating instinct remains undeveloped, and the personality drops into a general indifference. In more developed personalities the physiological stages of fully developed sexuality are outlined and may remain fixed into old age. In young schizophrenics the erotic life is characterized by intellectualism and limitation to self; the psychotic experiences concern bodily integrity. Older schizophrenics may develop active enmity to sexuality, or the predominantly physical urge may produce hypersexuality and perversions. The various forms of "love at a distance" may occur, or the love object

may become an ego phantom. In married schizophrenics sexuality is not a function of a united life, but a factor *sui generis*. The isolation of the sexual sphere in schizophrenics arises from defective psychophysical integration which results in absorption in one's own body, anaesthesia, and a feeling of strangeness.—*M. E. Morse* (Baltimore, Md.).

4678. **Markuszewicz, R.** Der Triebkonflikt. (Conflict of drives.) *Psychiat. neurol. Bl.*, Amst., 1938, 42, 463 ff.—[Abstracted review; original not seen.] Neuroses do not result from a conflict between morals and the sex drive, but rather from that between the latter and the drive towards survival. Whereas Freud explained conflict as the result of the ego's forced choice among contrasting tendencies co-existing in the id, the author maintains that conflicts already exist in the id and merely are observed by the ego.—*H. Beaumont* (Kentucky).

4679. **Martin, H. O.** Sella turcica und Konstitution. (Sella turcica and constitution.) Leipzig: Thieme, 1941. Pp. 107. RM 5.70.—[Abstracted review; original not seen.] This monograph attempts to draw conclusions concerning constitution in psychopathology and the size and shape of the sella turcica. There are 24 chapters each accompanied by a bibliography.—*M. Keller* (Butler Hospital).

4680. **McCullagh, E. P., & Tupper, W. R.** Anorexia nervosa. *Ann. intern. Med.*, 1940, 14, 817-838.—[Abstracted review; original not seen.] Based on a review of the literature and 27 cases of anorexia nervosa this paper discusses the precipitating factors, the morbid mental state, and the physical and laboratory findings.—*M. Keller* (Butler Hospital).

4681. **Menninger, W. C., Menninger, K. A., & Knight, R. C.** The psychological examination: an outline of procedure in the determination of the mental status of the psychiatric patient. *Bull. Menninger Clin.*, 1941, 5, 97-110.—The authors present a detailed outline of the scheme of psychological examination in use at the Menninger Clinic. Major headings are: general observations, perception, intellection, emotion, behavior as observed by the examiner and by attendants, special investigatory procedures, psychological tests, and sexuality.—*W. A. Varvel* (Texas A. & M.).

4682. **Moore, T. V.** Religion and mental hygiene. *Linacre Quart.*, 1941, 9, 29-38.—Statistics concerning the incidence of insanity in Massachusetts support the belief that insanity occurs when intense mental strain brings out the inherent weakness of the individual. Religion as a basis of mental hygiene is conceived of as "moral virtue by which man gives to God the service that is His due." The development of a wholesome personality is a religious duty.—*D. Miller* (U. S. Employment Service).

4683. **Moreno, J. L.** The philosophy of the moment and the spontaneity theatre. *Sociometry*, 1941, 4, 205-226.—This is the first instalment of a translation of *Das Stegreiftheater*, published in Berlin in 1923, giving the background of the concepts of the psychodrama. The present instalment

deals with the following: status nascendi; analysis of theatre from the point of view of the category of the moment; the spontaneity test; the analytic difference between the spontaneity player and the dramatic actor; the spontaneity state; mechanics of production; analysis of the creative act and creative forms; pathology of spontaneity work; and machine-drama and the spontaneity principle. "Beyond the limited domain of the theatre, the concepts of spontaneity and spontaneity training loom as the most important remedial agents for present civilization in its totality."—*L. J. Stone* (Vassar).

4684. Mouchet, E. Ojeada sintética sobre la anartria y la afasia. (Comprehensive review of anarthria and aphasia.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 541-557.—An exposition of the subject with a case report.—*M. E. Morse* (Baltimore, Md.).

4685. Norbury, F. G. Applications of vitamin B₁ to neuropsychiatry. *Illinois med. J.*, 1940, 78, 228-232.—The assimilation of vitamin B₁ is of great importance to the integrative activity of the nervous system. Neuropsychiatric disorders definitely aided by vitamin B₁ include Korsakoff's psychosis, delirium tremens, alcoholic hallucinosis, polyneuritis resulting from heavy mental intoxication (arsenic), alcoholic polyneuritis, and pernicious anemia. The administration of vitamins intraspinaly is not justified on the basis of present knowledge.—*D. Miller* (U. S. Employment service).

4686. Palmer, H. A. Mental sequelae of head injury. *J. ment. Sci.*, 1941, 87, 370-382.—A classification is proposed: (1) simple stunning; (2) minor concussion, delayed collapse, and post-traumatic automatism; (3) major concussion with cerebral contusion; (4) cases showing evidence of topical lesion, including epilepsy and narcolepsy, punch-drunk, etc.; (5) post-traumatic dementia; (6) post-traumatic syndrome with these symptoms: headache, vertigo, emotional lability, especially explosive irritability, intolerance for alcohol, tremor, low blood pressure, impaired memory and concentration, abnormal fatigability, hyperidrosis, intolerance to heat; (7) post-traumatic neurasthenia; (8) post-traumatic alcoholism (alcohol predisposing to head injury and head injury causing a lowered tolerance for alcohol); (9) post-traumatic psychoneuroses, the majority of which are of the anxiety type (characterized by terror) or hysteria type; (10) post-traumatic psychoses.—*W. L. Wilkins* (Milwaukee, Wis.).

4687. Pollock, H. M. Mental disease and social welfare. Utica, N. Y.: State Hospitals Press, 1941. Pp. iv + 237. \$2.00.—Republished in book form are 16 special research studies designed to contribute to psychiatric knowledge or to serve administrative or preventive purposes, particularly in relation to social welfare and the treatment and prevention of mental disorders. They are based primarily on New York State statistics. Representative chapter headings are: the expectation of mental disease; economic loss to New York State and the United

States on account of mental disease, 1931; the depression and mental disease in New York State; trends in outcome of general paresis; recurrence of attacks in manic-depressive psychoses; mental disease in the United States in relation to environment, sex and age, 1922; what happens to patients with mental disease during the first year of hospital life; a statistical study of 1,140 dementia praecox patients treated with metrazol; mental disease in Peru; thirty years of alcoholic mental disease in New York State; and is the paroled patient a menace to the community? Index.—*M. H. Erickson* (Eloise Hospital).

4688. Roosen, R. Retrograde Amnesie und Thixotropie. (Retrograde amnesia and thixotropy.) *Mtschr. Psychiat. Neurol.*, 1941, 103, 374-377.—Thixotropy is the quality, which many colloids have, of undergoing transient liquifaction under mechanical influences, especially shaking. According to students of colloids, the cell contents can be influenced thixotropically. Roosen presents a hypothesis of the mechanical production of retrograde amnesia, particularly after concussion, in this manner. In addition to other injuries due to concussion, the cortical cells are changed transiently into a more fluid state, which creates an energetic situation more favorable to ekphoria of older engrams than to manifestation of memory traces of the immediate past. Normal conditions return when the thixotropic effect has passed off. Nerve cell fluidity occurs also, but less strikingly and strongly, when oxidative processes are insufficient and acid metabolic products accumulate. This may also produce retrograde amnesia.—*M. E. Morse* (Baltimore, Md.).

4689. Rosenberg, E. H., & Guttman, E. Chronic neurotics and the outbreak of war. *Lancet*, 1940, 239, 95-96.—The authors report their observations of a group of 96 chronic neurotics attending psychiatric clinics, who "have been followed up since the outbreak of war. . . . Fifty-six remained unaffected by the war, and of the 43 affected 17 improved and 23 became worse. Of the 23 who became worse 15 developed symptoms of anxiety. . . . The type of mental condition, rather than its chronicity, is the decisive factor in the reaction of chronic neurotics to the outbreak of war. Patients with obsession, hypochondria, or chronic hysteria were . . . no more in need of medical attention in the early days of the war than when under normal conditions. . . . Patients whose complaints were merely those of mild depression or of chronic anxiety . . . appeared much more likely to become acutely ill under stress, unless suitable provision could be made for them beforehand. . . . The inelasticity of the psychological make-up of the chronic obsessional and the hypochondriac" was confirmed.—*C. K. Trueblood* (Cambridge, Mass.).

4690. Ross, W. D. The contribution of the Rorschach method to clinical diagnosis. *J. ment. Sci.*, 1941, 87, 331-348.—A series of 236 individuals examined by the Rorschach technique was studied for the occurrence to 2 sets of signs. The criterion

of 5 or more of the signs described by Piotrowski is an indication, not of cerebral lesion, but of some dysfunction of the nervous system, either organic or functional. 5 or more of the signs described by Miale and Harrower-Erickson appear to be indicative, not of a manifest psychoneurosis, but of a basic personality insecurity.—*W. L. Wilkins* (Milwaukee, Wis.).

4691. Sargant, W., & Slater, E. Acute war neuroses. *Lancet*, 1940, 239, 1-2.—The authors report upon cases of "acute shell-shock" studied and treated by them among members of the BEF after the evacuation from Dunkirk. Such cases "showed the physical signs of exhaustion, with mixed anxiety and hysterical symptoms. For mild cases immediate treatment by rest, fluid, full diet, and sedative drugs was found effective. For more severe cases continuous narcosis proved beneficial. It was found desirable to relieve acute hysterical symptoms, including amnesias, at the earliest moment by persuasion under hypnosis, produced directly, or with the aid of intravenous barbiturate."—*C. K. Trueblood* (Cambridge, Mass.).

4692. Schroeder, P. L. Orthopsychiatry in the community. *Amer. J. Orthopsychiat.*, 1941, 11, 413-423.—This is the presidential address delivered at the 1941 meeting of the American Orthopsychiatric Association. The author reviews the contributions of orthopsychiatry to the problems of delinquency. Orthopsychiatry is largely responsible for the change from a static to a dynamic psychiatry and for the integration of the biologic and the social sciences. "In its growing awareness of a need for its services at the point where people live, its greater identification with the people, it has become increasingly less artificial and more real, less isolated and more democratic."—*R. E. Perl* (Jewish Board of Guardians).

4693. Schulz, B. [Incidence of psychoses among children both of whose parents had affective psychoses.] *Z. ges. Neurol. Psychiat.*, 1940, 169, 311 ff.—(*Child Developm. Abstr.* XV: 824).

4694. Silkworth, W. D. A highly successful approach to the alcoholic problem. *Med. Rec.*, N. Y., 1941, 154, 105-107.—The author reviews briefly the problem of alcoholism and stresses the effectiveness and success of the Alcoholics Anonymous movement.—*M. H. Erickson* (Eloise Hospital).

4695. Stromgren, E. Episodiske Psykoser. (Episodic Psychoses.) Copenhagen: Munksgaard, 1940. Pp. 131.—[Abstracted review; original not seen.] By episodic or borderline psychoses the author refers to those mental diseases which have in common a favorable prognosis. The book consists of 5 lectures. (1) The thesis of Kraepelin which would limit the nosological units to few and broad categories is compared with Wernicke's thesis of localization. (2) Following the latter thesis a number of distinct mental diseases are collectively classified as psychoses of degeneration among which the writer discusses in particular a motility psychosis. (3, 4) Epileptic and schizophrane borderline psychoses, and paranoid episodic psychoses are dis-

cussed. The latter have a special reference to convicts. (5) A schema of the nosological unities which the writer subsumes under the heading of episodic psychoses is described. Borderline psychoses which bear a real relationship to recognized major mental diseases are differentiated from those which bear only symptomatic likenesses.—*N. J. F. Van Steenberg* (National Youth Administration).

4696. Surgeon General's Office. Neuropsychiatric examination of applicants for voluntary enlistment and selectees for induction. Circular letter No. 19. *J. Amer. med. Ass.*, 1941, 116, 2509-2511. Also *War Med.*, Chicago, 1941, 1, 418-425.—This practical guide for examining physicians lists personality deviates requiring special attention, gives brief descriptions of the more common neuropsychiatric disorders with diagnostic points, and states the absolutely and probably disqualifying conditions.—*M. E. Morse* (Baltimore, Md.).

4697. Symonds, C. P. The neurological approach to mental disorder. *Proc. R. Soc. Med.*, 1941, 34, 289-302.—The neurologist approaches mental disorder with the concept that the brain, at every level, is governed by the same principles as at the spinal level. He finds no fixed syndromes, but roughly and arbitrarily defined reaction types, the individual's experience determining the final pattern. Consciousness, undefinable in physiological terms, is not the neurologist's prime concern. Some causes operate at levels usually accompanied by it; others do not. Unconscious activity means only physiological experience. Unconscious cerebral function has meaning; unconscious mind, none. Attempts at localization on higher cerebral levels have as yet contributed little to the understanding of mental disorder. Central pain, affective disorders (central disturbances of feeling), and "medical psychology" (a legitimate camouflage because of popular prejudice) are discussed. Psychotherapy rarely accomplishes more than symptomatic improvement and has no justification as a specialty. The merging of neurology and psychiatry is both inevitable and desirable because the brain is the organ of the mind, and it is indivisible. Recent research has emphasized their common interests.—*M. E. Morse* (Baltimore, Md.).

4698. Taylor, S. Mental illness as a clue to normality. *Lancet*, 1940, 238, 677-680; 730-734.—The author advocates the following propositions: "(1) The division of mental illness into two distinct classes, the neuroses and psychoses, is not justified by the facts. (2) A gradual transition exists between every variety of mental illness and normality. . . . (3) A similar transition may be found between the different mental illnesses themselves. The average psychiatric syndrome is a mixed picture of two or more reaction types. . . . (4) Each mental illness representing a caricature of normality, it is both possible and profitable to analyze the basic personality of the normal individual in these terms. (5) There is evidence suggesting that exaggerations of personality in mental illness may be biochemically

determined. Equally, then, the normal basic personality may be biochemically determined. (6) The rapid growth of knowledge of psychopathology has tended to obscure the study of the basic personality as revealed by the investigation of mental illness. Psychopathology emphasizes environmental changes, especially those in early years . . . and neglects the inherited mental material on which the environment acts. . . ."—C. K. Trueblood (Cambridge, Mass.).

4699. Thom, D. A. Schizoid and related personalities. *War Med.*, Chicago, 1941, 1, 410-417.—The last war demonstrated that schizoid personalities are quickly and permanently wrecked by military life. The task of draft boards is to recognize, either by their behavior during the examination or by their history, men liable to break mentally under army life during the next 10 years. If the selectee's attitude is anxious, embarrassed, suspicious, or hypochondriacal, he is probably too introverted to be suitable for the army. By no means all schizoids are of the shut-in type; they vary tremendously during different phases of their development. Many carry on in civil life without being considered abnormal and have no conscious difficulties in social adjustment. However, their common denominator is lack of adaptability. They may accept great changes in their lives with apparent indifference, but actually they are incapable of assuming additional strain. The prepsychotic or the psychotic during a remission may pass the most astute examiner unless the history is known. The employment record and sex attitude are especially significant. Adaptability cannot be measured or predicated except within limits. The best reliance is psychiatric knowledge and experience.—M. E. Morse (Baltimore, Md.).

4700. Vedder, R. [Infantile schizophrenia.] *Maandschr. Kindergeneesk.*, Leiden, 1940, 9, 352 ff.—(*Child Develpm. Abstr.* XV: 773).

4701. Wilson, A. T. M. Reactive emotional disorders. *Practitioner*, 1941, 146, 254-258.—This is a discussion of these conditions among civilians during war. The most common form, next to an empty hedonism, is anxiety, open or concealed terror resulting from inability to digest the emotions belonging to grossly disturbing experiences. "Bomb bores" try to rid themselves of their memories by repetitive minor dramatic recitals while absorbing reassurance and creating interest in themselves. Reactive disturbances during war often concern guilt feelings over real or imagined injury to others. Power of inducing confession without authority to absolve may be dangerous, as shown by tragedies in certain religious groups. Pathological mourning reactions increase during war; they are not necessarily due to bereavement and sometimes to loss of self-esteem. Expiatory benevolence is mixed with bitterness, anger, or justified self-reproach. Depression is the social equivalent of the biological recuperation of sleep; it cannot be avoided if the emotional injury is severe. Behind it is anger and

resentment toward the world and the sense of futility which afflicts everyone in wartime. The best defense is irony. Fatigue states are often the physiological form of depression and, through general inhibition, hide bitterness, hatred, and guilt.—M. E. Morse (Baltimore, Md.).

[See also abstracts 4497, 4507, 4517, 4562, 4612, 4620, 4648, 4705, 4765, 4781, 4782, 4785, 4787, 4794, 4799, 4808, 4809, 4818, 4823, 4835, 4849, 4853.]

PERSONALITY AND CHARACTER

4702. Adams, C. R., & Lepley, W. M. The personal audit. State College, Pa.: Authors, 1941. \$5.00 per 25; \$0.50 per specimen set.—This test is designed to measure 9 relatively independent factors of personality: (1) sociability or extroversion; (2) suggestibility; (3) annoyance or irritability; (4) rationalization or alibi tendency; (5) anxiety, emotionality, or fear tendency; (6) sexual emotionality and conflicts; (7) personal intolerance; (8) flexibility of attitudes; (9) thought intensity, worry over unsolved problems. The test may be used with individuals having a high school education or its equivalent. Centile norms for males and females are available for college students. Reliability coefficients (odd-even) range from .90 to .96.—M. Keller (Butler Hospital).

4703. Bayon, H. P. A medico-psychological revision of the story of Jehanne, la pucelle de Domrémy (Joan of Arc). *Proc. R. Soc. Med.*, 1941, 34, 161-170.—In a welter of political complications somewhat resembling those of France today, a peasant girl evolved a political faith which the modern historian finds difficult to explain because national patriotism had not then been formulated. The boldness of her plans, the vigor of their execution, and her personal initiative were remarkable. She was one of the first apostles of nationalism and the first French practitioner of military realism. Her restless activity finally led to her downfall. Her mental normality should be judged, not by her voices and visions, but by her behavior, which throughout her career was that of a singularly brave, intensely devout, impetuous, self-assertive country girl, fully conscious of her power. Her voices were not morbid. They began as simple pious admonitions (not rare at puberty), and later became political. They were the product of auto-suggestion, giving her a conviction of her mission and divine approval and guidance in carrying out her plans. Her prophecies were only "favorable prognoses." Her transient recantation during her inquisition recalls the recent Russian trials. In short, she behaved as a sane, constructive person of her time and its beliefs.—M. E. Morse (Baltimore, Md.).

4704. Fay, P. J., & Middleton, W. C. The ability to judge sociability from voice as transmitted over a public address system. *J. soc. Psychol.*, 1941, 13, 303-309.—The voices of 5 men and 5 women speakers representing a wide range of sociability as

measured by the Flanagan sociability scale of the Bernreuter Personality Inventory were presented twice in different orders over a public address system to 38 listeners. The latter rated the sociability of each speaker, judging by the voice only, on a 7-point scale. Ratings on sociability were inconsistent, and the reliability coefficients were low. The r between ratings on sociability and the Bernreuter percentiles was .07. There was some evidence that judgments of 3 of the voices were stereotyped.—G. Brighthouse (Occidental).

4705. Frey, H., Stokes, A. B., & Ewing, I. R. Discussion on the psychological aspects of deafness. *Proc. R. Soc. Med.*, 1940-41, 34, 309-320.—The psychological response to an organic disability is, considered broadly, nonspecific and takes one of relatively few paths: anxiety, depressive, hysterical, or paranoid states. The reaction pattern is a personality component, less overt when hardship was absent, but more florid under an organic disability which creates social deprivation. A particular organic disability may be a special hardship for a certain type of personality. Deafness is a peculiar trial for persons with inferiority feelings, to which they react with anxiety, anger, depression, withdrawal, or a paranoid trend. More acute situations precipitate depression or anxiety, while slowly developing deafness may bring out a compensatory paranoid response. The deaf usually overestimate both the degree and the practical consequences of their disability, feeling it as a loss of part of their personality. The general public does not consider deafness as a serious defect, as witness the deaf man as a comic figure. The psychology and education of deaf children are also discussed. Deafmutes form a community apart and, if educated, are usually emotionally stable.—M. E. Morse (Baltimore, Md.).

4706. Friedländer, K. Charlotte Brontë; zur Frage des masochistischen Charakters. (Charlotte Brontë; the problem of the masochistic character.) *Int. Z. Psychoanal. Imago*, 1941, 26, 32-49.—Charlotte Brontë's biographers have failed to discover the real personality hidden behind her shyness, piety, sensitiveness, constant suffering, and decidedly feminine behavior. In reality she was a woman with a masculine intellect who was equipped with a high degree of critical ability and determination to attain her goal. She was able to force her will on her sisters, her father, and other men and women alike. Her interesting personality resulted from a combination of masochistic phantasy, a father fixation, and a special type of sublimation of feminine protest, which can be described best as a phallic character with masochistic phantasies.—H. Beaumont (Kentucky).

4707. Gould, R. Some sociological determinants of goal strivings. *J. soc. Psychol.*, 1941, 13, 461-473.—81 male college students were divided into 2 groups on the basis of aspiration-level. There were marked contrasts in sociological background. The low group (small discrepancy between performance and estimate of future performance) comes from a

predominantly Protestant American background of high economic status. The high group has a large percentage of foreign-born fathers, lower average income, and more than half belong to minority religious groups.—G. Brighthouse (Occidental).

4708. Johannsen, D. E. The effect of neuroticism upon the capacity to observe the emotional reactions of friends. *J. soc. Psychol.*, 1941, 13, 291-302.—107 women students filled out the Bernreuter Personality Inventory on themselves and on 3 close friends. The average score given by 3 friends correlates $.500 \pm .057$ with the self-score, and the difference between the scores given by friends and the self-scores correlates $.032 \pm .035$ with the marker's self-score. "By the method used in this study, no evidence is found to suggest that the adjustment of an individual has any effect on the way he marks a neuroticism inventory for his friends."—G. Brighthouse (Occidental).

4709. Lüpplé, E. Die Arbeitskurve als charakterologisches Prüfverfahren. (The work curve as a characterological test procedure.) *Z. angew. Psychol.*, 1940, 60, 1-63.—This study is concerned with an examination of the work curve as a diagnostic aid in the characterological selection of military personnel. 100 officer applicants served as subjects in adding figures for 1 hour. Information regarding their personalities obtained from the work curves was compared with that obtained from various regularly used tests. 72% of the information obtained by the 2 methods was in striking agreement. In only 2% was actual contradiction evident. The work curve does not throw light on social adjustment characteristics of a person, but it is believed to be valuable as a guide to the vital, temperament, will, and action components of an individual.—G. F. J. Lehner (Miami).

4710. Lawton, G. After sixty-five? *Ment. Hyg.*, N. Y., 1941, 25, 414-419.—Modern living prepares the old person only for job adjustment. Provisions for the education of the elderly for recreation, for suitable working, and to offset loneliness are necessary. A guidance bureau for the retired is advocated.—W. L. Wilkins (Milwaukee, Wis.).

4711. McClelland, A. M., & McManus, R. L. Appraising personality; the use of anecdotal records in appraising personality traits. *Amer. J. Nurs.*, 1941, 41, 579-584.—Less tangible, difficult-to-measure personality factors are as important as more easily measured abilities in the personal and professional adjustment of nurses. Anecdotal records can serve as objective evidence of the student's personality provided that only observable phenomena be recorded. In one school these records are taken by the student and discussed with the ward instructor weekly. Upon completion of clinical service the personal qualities of each student are summarized by her ward instructor.—D. Miller (U. S. Employment Service).

4712. Meyer, A. Spontaneity. *Sociometry*, 1941, 4, 150-167.—This is an address to the Mental Hygiene Division of the Illinois Conference of

Public Welfare, October, 1933, on the importance of balanced and disciplined spontaneity. "Spontaneity is a quality that we have reason to pay specific attention to in order to get out of the purely static habit of disregarding the active and forceful features of our subjects, the human individuals and groups. Scientific objectivity does not imply disregard of human differences . . . we must treat man with and for that spontaneity that spells also responsibility as made up of ever recurrent and disciplined spontaneity."—*L. J. Stone* (Vassar).

4713. Müller, E. *Die grosse Kaiserin Maria Theresia, hauptsächlich vom menschlichen Standpunkt aus.* (The great Empress Maria Theresa, considered chiefly from the human standpoint.) *Allg. Z. Psychiat.*, 1941, 117, 356-367.—Müller discusses Maria Theresa in the light of German characteristics and the formation of Greater Germany. Her German blood made itself felt in an intuition of the eternal nature of the German strain and blood and soil. If she had made a different matrimonial alliance, the formation of Greater Germany would have been advanced by 200 years. However, Austria's great service to the German people and their culture was to preserve the noble German way of life and the old totalitarianism until Hitler could take over the country. As a wife and mother she is an inspiration to modern German women. She had 16 children (quite a number of whom died in infancy) while she was waging 3 wars.—*M. E. Morse* (Baltimore, Md.).

4714. Podolsky, E. *Psychoanalytical views of intelligence.* *Psychoanal. Rev.*, 1941, 28, 359-362.—"Intelligence is the capacity for acquiring, absorbing and using knowledge of reality." It is manifested particularly in the capacity to identify oneself with persons and things in the outside world. It is divided into 2 categories, introverted and extraverted or concretized. When intelligence expresses itself as compulsive thinking, the individual is escaping by a de-emotionalization process from an unsolved problem of parent fixation.—*G. Brighouse* (Occidental).

4715. Rothery, J. W. M., & Roens, B. A. *Applications of personality and character measurement.* *Rev. educ. Res.*, 1941, 11, 94-108.—The literature appearing from January, 1938 to July, 1940 is reviewed under these headings: social and religious attitudes of college students; emotional and social adjustment of college students; interests, personality, and college achievement; factors affecting changes in scores; personality studies of other adult groups; personality studies of adolescents and younger children; problem and delinquent children; effects of a handicap on personality; personality and various factors. The bibliography lists 103 titles.—*M. Keller* (Butler Hospital).

4716. Symonds, P. M., & Samuel, E. A. *Projective methods in the study of personality.* *Rev. educ. Res.*, 1941, 11, 80-93.—This is a review article for the period ending July, 1940 with emphasis on the literature appearing in the last 3 years. Topical

headings are as follows: drawing, play, Rorschach, gesture and expression, handwriting, voice, drama, stories and pictures, conclusion. The bibliography lists 81 titles.—*M. Keller* (Butler Hospital).

4717. Thorpe, L. P., Clark, W. W., & Tiegs, E. W. *California test of personality; primary series.* Los Angeles, Calif.: California Test Bureau, 1940. \$1.00 per 25; specimen set \$0.25.—This test, for use in grades kindergarten to 3, has been designed "to identify and reveal the status of certain highly important factors in personality and social adjustment usually designated as *intangibles*." There are 96 questions to which the pupil responds by circling Yes or No. Percentile norms are obtained on 6 sub-sections of self-adjustment: self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, withdrawing tendencies, and nervous symptoms; and on 6 sub-sections of social adjustment: social standards, social skills, anti-social tendencies, family relations, school relations, and community relations. Total adjustment norms are available. The test has no time limit and may usually be administered in 45 minutes.—*S. G. Dulsky* (Rochester Guidance Center).

4718. Tiegs, E. W., Clark, W. W., & Thorpe, L. P. *California test of personality; secondary series.* Los Angeles, Calif.: California Test Bureau, 1939. \$1.00 per 25; specimen set \$0.25.—This test is designed for use in grades 9-14. It is similar in structure to the primary series but consists of 180 questions, 15 in each of 12 sub-sections. The test has no time limit and may usually be administered in 45 minutes. There is a list of 74 activities and interests to which the pupil indicates the things he likes to do or would like to do and what he actually does.—*S. G. Dulsky* (Rochester Guidance Center).

4719. Traxler, A. E. *Current construction and evaluation of personality and character tests.* *Rev. educ. Res.*, 1941, 11, 57-79.—The literature for the period from January, 1938 to July, 1940 is reviewed under the following headings: personality inventories: new and revised tests yielding several scores, personality measurement of the survey type, studies of the Bernreuter Personality Inventory, studies of the Humm-Wadsworth Temperament Scale, studies of other personality inventories, simplified scoring of personality tests, validity of self-estimates of personality, stability of scores on personality inventories, introversion-extroversion, factor analysis in the study of personality, analysis of items, experiments with unusual approaches; interest inventories: evaluation of interest measures, technics of measuring interests; attitudes and opinions: new tests of social attitudes, technics of measuring attitudes and opinions; persistence tests and other measures: construction of new rating scales, aspects of rating scale technics, other measures and procedures. The bibliography includes 157 titles.—*M. Keller* (Butler Hospital).

4720. Wartegg, E. *Gestaltung und Charakter. Ausdrucksdeutung zeichnerischer Gestaltung und Entwurf einer charakterologischen Typologie.* (Form

and character. Interpretation of expression from drawings and an outline of a characterological typology.) Leipzig: J. A. Barth, 1939. Pp. X + 261. RM 18.00.—[Abstracted review; original not seen.] By means of various drawing tests the author obtains individual personality profiles which serve as the basis for a characterological typology. The expression norms obtained by him have practical value for esthetics, pedagogy, vocational guidance, and psychiatry.—G. F. J. Lehner (Miami).

4721. Washburne, J. N. **Factors related to the social adjustment of college girls.** *J. soc. Psychol.*, 1941, 13, 281-289.—The Washburne Social Adjustment Inventory was given to 119 freshman and 119 junior girls who had been tested for intelligence, and who had answered a questionnaire relating to home background, college activities, and college status. It was found that "those college girls are most likely to be socially and emotionally well adjusted (a) who are upperclassmen, (b) who come from unbroken homes, (c) who work to earn part of their way through college, (d) who are engaged in college activities, and (e) who are in the upper 25 per cent of college students in intelligence."—G. Brighouse (Occidental).

4722. Watters, T. A. **Nervous and mental aspects of old age.** *New Orleans med. surg. J.*, 1940, 93, 187 ff.—[Abstracted review; original not seen.] The problem and management of old people should be taken more seriously. Those who are frankly psychotic should be institutionalized, but there are a large number who with proper guidance and help could be made to continue living happy and useful lives.—M. Keller (Butler Hospital).

4723. Zinke, H. **Die Bindungsformen in der Handschrift.** (Connecting forms in handwriting.) *Z. angew. Psychol.*, 1940, 60, 96-115.—The author discusses the psychosymbolic significance of various kinds of connecting strokes in handwriting.—G. F. J. Lehner (Miami).

[See also abstracts 4490, 4584, 4643, 4646, 4679, 4690, 4698, 4699, 4726, 4757, 4758, 4798, 4852.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

4724. Allport, G. W. **Liabilities and assets in civilian morale.** *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 216, 88-94.—"Morale is a person's confidence in his ability to cope with whatever the future may bring." (Rundquist and Sletto.) "National morale is merely the morale of single persons supplementing the morale of other persons intent upon solving the same problems. National morale . . . [is] . . . high when there are clear and fixed goals shared by a large majority of the citizens; when there is confidence in the attainment of these goals, in leaders, in one's associates, and in oneself; when the actions of separate citizens are integrated and cooperative, and when hostility is expressed against the forces frustrating the national group rather than toward

other individuals within the national group." Against present-day morale is: the drawing of a false parallel with the last war; the ravages of the depression, including among some, violently antidemocratic attitudes; the national habit of destructive criticism and lack of respect for our leaders; the taking for granted of liberties; the habit of expecting personal profit; distrust of democratic capability for quick decision; and factionalism. Working for positive morale are: American realism; the deep potential strength of democratic morale; the emerging of unity in national purpose; the American habit of intense cooperation; hatred of tyranny; finding relief from anxiety in group cooperation in the emergency; American sense of humor; and American inventiveness.—L. J. Stone (Vassar).

4725. Appelhof, G., Jr. **You can be happily married.** New York: Macmillan, 1941. Pp. xii + 218. \$2.00.—(*Child Developm. Abstr.* XV: 886).

4726. Atwood, J. H., Wyatt, D. W., Davis, V. J., & Walker, I. D. **Thus be their destiny; the personality development of Negro youth in three communities.** Washington, D. C.: Amer. Youth Commission of Amer. Council Education, 1941. Pp. xii + 96. \$0.75.—This booklet presents 3 brief community studies prepared for the purpose of giving an understanding of Negro youth. The independent surveys are of widely separated and very differently organized communities: Milton, Pa. (6 pages); Greensboro, N. C. (58 pages); Galesburg, Ill. (27 pages). The preface and conclusion are contributed by R. L. Sutherland who points up the general interpretation that "frustration over minority racial status is real and corroding, penetrating all aspects of life and conditioning personality, though not always in the same way or with the same results. . . . The main basis of frustration is economic." These general findings confirm those of the other, more intensive studies of the American Youth Commission and contribute further details concerning Negro life in small, "liberal" communities of the North (Milton and Galesburg) and an upper-middle-class group in the progressive South (Greensboro).—E. L. Horowitz (City College, New York).

4727. Ballin, M. R., & Farnsworth, P. R. **A graphic rating method for determining the scale values of statements in measuring social attitudes.** *J. soc. Psychol.*, 1941, 13, 323-327.—A considerable saving in time and effort can be achieved by using a graphic rating method in setting up an attitude scale. In this method judges spot each statement on an 11-inch line. The utility of the method was demonstrated by applying it to 20 statements of the Thurstone-Peterson Scale of Attitudes Toward War, Form A. 3 groups, each consisting of 100-200 students, acted as judges, using the graphic method, and a 4th group used the Seashore-Hevner method on the same statements. Results obtained from all 4 groups conformed closely to the Thurstone-Peterson scale values. The use of a 22-cm. instead of an 11-inch line would be a further improvement.—G. Brighouse (Occidental).

4728. Bateman, R. M., & Remmers, H. H. A study of the shifting attitude of high school students when subjected to favorable and unfavorable propaganda. *J. soc. Psychol.*, 1941, 13, 395-406.—3 senior social science classes consisting of 70 high school pupils who tended to favor labor unions heard a paper antagonistic to unions and a day later a paper giving favorable propaganda on unionism. They were tested on the Kelley-Remmer Scales for Measuring Attitude toward any Institution before, between, and after the 2 papers and again retested. All averages showed significant shifts in the direction intended by the stimulus material. The retesting after 2 months showed significant shifts back toward the attitude expressed in the first used stimulus material. Distributions tended to be bimodal; attitudes are for or against, but not neutral. The girls showed a tendency to be more influenced by the propaganda than did the boys.—G. Brighouse (Occidental).

4729. Benedict, R. Race problems in America. *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 216, 73-78.—Anthropological investigation makes it obvious "that national segregation of traits is illusory" yet the man-made problem of racial conflict remains for the social scientist to recognize and to help alleviate. Brusque Americanization under emergency pressure, as in the last war, will not help. The long-time programs of schools and good-will organizations are based on encouragement and acceptance of cultural diversity, as in Switzerland. "Such a philosophy overlooks the crucial differences which have been shown in every cultural study of minority groups in America," where the picture is one of rapid sloughing-off of European tradition and a strong wish to identify with America as far as "the defensive attitudes of longer established Americans" permit. To avoid the "made in Europe trade-mark" advantage must be taken of the alien's response to appeals to him as an American, as is the case with labor unions.—L. J. Stone (Vassar).

4730. Bonaparte, M. The myth of the corpse in the car. *Amer. Imago*, 1941, 2, 105-126.—An analogy is drawn between various versions of a current European myth and the different stages through which the practice of sacrifice as a means to propitiate the gods has passed. In the myth the predicted end of the war or the death of Hitler appears to be assured through the mysterious death of a stranger ('the corpse in the car').—W. A. Varvel (Texas A. & M.).

4731. Bostock, J. The psychology of war. *Med. J. Austr.*, 1941, 1, 723-728.—Peace and war are entities on different emotional levels: stability and civilization vs. obliteration of all previous standards and annihilation. The problem is to change the recruit's peace persona into the jungle persona through inculcating grim determination and hate and overcoming fear by mobilization of the life forces for effective action. This war is psychological, due to differences in ideologies rather than make-up between the Allies and Axis. Conflicting sentiments

can be harnessed only by an overriding sentiment. This is the key to war prevention, which has never yet been grasped, although blind stabs have been made for centuries. The best means of forming this sentiment is federal union, constructed in a mood of detachment and disciplined enthusiasm. Professional people are peculiarly adapted to promoting an overriding sentiment because they are so accustomed to standards of merit, truth, and honesty irrespective of nation, creed, or race that extension of the principle to international relations seems obvious. They should insist on psychological advice in creation of the peace terms. Immediate organization of a conference on the psychological implications of war and peace is advocated.—M. E. Morse (Baltimore, Md.).

4732. Britt, S. H. Newspaper circulation and national elections. *Social Sci.*, 1941, 16, 254-257.

4733. Brotemarkle, R. A. Development of military morale in a democracy. *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 216, 79-87.—"Morale is the readiness for optimal personality response, and, as such, gives emphasis to the importance of the character of the individual. Morale effectiveness is dependent upon the determinants of individual strength of character. To guarantee the best possible military morale, individuals of strength of character must be selected for thorough training. Selection on the basis of mere ability is not enough." Military morale itself is one unit in the economic, military, and psychological "tridimensional fields of action." The military phase proper presents 6 stages: attitude to the draft; selective training; anticipation of action; the combat stage; the post-combat stage; and the stage of reserve training for later preparedness. Morale at all stages may be influenced by the material equipment and by personnel factors, the latter divisible into actions and words. Under the head of action are the forces of military routine, ceremony, drill, etc.; under verbal devices are tradition, exhortation, propaganda, etc. Democratic, as opposed to totalitarian systems, can even "make use of the higher levels of character development," where the "whole man" takes part, and can use such devices as counselling and discussion.—L. J. Stone (Vassar).

4734. Cantril, H. The psychology of social movements. New York: John Wiley, 1941. Pp. xv + 274. \$3.50.—In part I a network of concepts is developed for the purpose of explaining individual action in the social environment. The central concept, frame of reference, is used to explain the origins of value, and to show how individual and social action acquire meaning. In part II these concepts are drawn upon to explain such varied mass phenomena as the kingdom of Father Divine, lynching mobs, the Oxford Group, the Townsend Plan, and the Nazi Party. The chapters of part II are documented with details and descriptive analyses of the social movements selected for special treatment.—C. C. Pratt (Rutgers).

4735. Chapin, F. S. The syntactical analysis of sociometric techniques: cases in point. *Sociometry*,

1941, 4, 177-183.—“Syntactical analysis is a powerful tool for the dissection of theoretical statements and working hypotheses of social research. This brief paper will examine two cases. First, an assertion about attitude measurement that represents a fairly common philosophic point of view. Second, one aspect of the controversy over units of measurement.” The first proposition examined (MacIver): “They seek to apply *mechanical methods* of measurement to things whose *very nature* they fail to understand.” The first italicized phrase is but a stereotype of reproof; the second can be restated and disproved. The second case “concerns the controversy over units of measurement in psychometric and sociometric scales.” The conclusion (from factor analysis, etc.) is that, at least in some scales, “there is no necessary intrinsic correspondence between the weights (units of measurement) and the objects or subject-matter (units of observation).”—*L. J. Stone (Vassar)*.

4736. Cottrell, L. S., Jr., & Gallagher, R. Important developments in American social psychology during the past decade. *Sociometry*, 1941, 4, 107-139.—This is a detailed examination of recent trends of thought in social psychology and neighboring fields. A tendency is noted toward an important new synthesis which has not yet appeared. Meticulous specialization has declined and hospitality to insights from other fields increased. Special sections are devoted to the influences of social anthropology, psychiatry, and studies of collective behavior.—*L. J. Stone (Vassar)*.

4737. Doob, L. W. Some attitudes underlying American participation in war. *J. soc. Psychol.*, 1941, 13, 475-487.—135 Yale students and 71 Massachusetts Institute of Technology students answered a questionnaire on attitudes towards war and American participation. 144 students answered a second questionnaire 12 weeks later. On the whole the students were opposed to war, in favor of the Allies, and midway in respect to patriotism. 34% shifted their attitudes after 12 weeks, but the changes represented a shift of only one step along a 3-point continuum. When shifts occurred, recall of the previously expressed attitude was below chance expectancy.—*G. Brighouse (Occidental)*.

4738. Eldridge, S. *New social horizons; design for a personality-centered culture*. New York: Appleton-Century, 1941. Pp. x + 444. \$3.50.—This book appraises the practices and goals of contemporary American institutions. A wide measure of socialization has resulted from public need and the inability of individual enterprise to supply the specific needs. A cooperative social order, oriented toward satisfying the needs and interests of the members of the society, is proposed. It takes into account personal differences and the formative factors in behavior. Means are offered by which personal and group interests may be implemented.—*H. A. Gibard (Brown)*.

4739. Eysenck, H. J. A critical and experimental study of colour preferences. *Amer. J. Psychol.*,

1941, 54, 385-394.—The present study attempts to resolve some of the differences existing regarding the major results of investigations of color preferences. In the experimental part of the study, 10 colored papers were used as stimuli. The *S*'s were chiefly university students, an equal number of men and of women. 12 *S*'s ranked the colors in order of preferences, the rankings were correlated, and the table of *r*'s factor-analyzed. Then 30 *S*'s ranked the colors, the average *r* between the rankings was found, and the average rankings of the men and women were calculated separately. These data were compared with those obtained by a large number of other investigators, and it was found that: (1) there is as much agreement between the color preferences of people as there is between intelligence tests, and it is connected with a general factor of aesthetic appreciation; (2) “subsidiary to this general factor of preference for colours is a bipolar factor, which divides those who prefer saturated colours from those who prefer unsaturated colors;” (3) there is high agreement between the sexes as regards color preference.—*D. E. Johannsen (Skidmore)*.

4740. Fessler, L. Psychology of nationalism. *Psychoanal. Rev.*, 1941, 28, 372-383.—Nationalism gives to its people a feeling of belongingness, unification, superiority, and strength; a freedom from the need for intellectual effort; and an outlet for aggressiveness. Eventually, however, nationalism arouses opposing elements. The principles of conscience and morality cannot be permanently suppressed, and through them we approach an abatement of the real scourge of mankind, anxiety.—*G. Brighouse (Occidental)*.

4741. Frank, L. K. Opportunities in a program of education for marriage and family life. *Ment. Hyg., N. Y.*, 1940, 24, 578-594.—Transfer of home-making functions of the family to other areas reveals the fundamental cultural functions of the family, which is the only form of association in which individuality may find opportunity to develop and function without interfering with necessary social processes and regulations. An assessment of the various designs for family living is necessary. Attitude rather than technique should be stressed in child-rearing, marriage, and sex.—*W. L. Wilkins (Milwaukee, Wis.)*.

4742. Fromme, A. On the use of certain qualitative methods of attitude research: a study of opinions on the methods of preventing war. *J. soc. Psychol.*, 1941, 13, 429-459.—This is an exploratory study to determine the value of the following techniques of attitude research: a questionnaire; interviews running for 4-7 hours; informal discussion of each response to the questionnaire; a cartoon technique; an adaptation of the method of thematic apperception; an interview blank; and the method of contradiction. 35 adult men served as subjects. These techniques give a new insight not available in strictly statistical studies.—*G. Brighouse (Occidental)*.

4743. Held, O. C. A comparative study of the performance of Jewish and Gentile college students

on the American Council Psychological Examination. *J. soc. Psychol.*, 1941, 13, 407-411.—Scores on the 1938 edition, for 158 Jewish freshmen at the University of Pittsburgh were compared with the scores of 156 randomly selected Gentile freshmen. The only significant group difference was that of Gentile boys on the linguistic portion of the examination. Their mean score was reliably lower than that of the Gentile girls, Jewish boys, and Jewish girls. The Jewish girls scored significantly higher on the linguistic portion of the test than they did on the quantitative parts. Jewish boys do better on the linguistic parts than on the quantitative parts, while the reverse is true for the Gentile boys; but neither difference is statistically significant.—G. Brighthouse (Occidental).

4744. Hofstätter, P. R. *Ruf und Bestand, ein methodologischer Beitrag zur Stammeskunde.* (Repute and actual state, a methodological contribution to folk study.) *Z. angew. Psychol.*, 1940, 60, 64-95.—200 subjects from each of 8 provinces of former Austria were given various intelligence tests and ranked on the basis of these results. Subsequently a certain percentage of these subjects were asked to rank, by the method of paired comparisons, these 8 provinces in order of their intelligence. The objective and subjective rankings are in full accord, indicating a close agreement between actual performance and reputed ranking.—G. F. J. Lehner (Miami).

4745. Murdock, G. P. *Anthropology and human relations.* *Sociometry*, 1941, 4, 140-149.—Data are cited from the author's "current study of sex regulation and social structure among 220 representative cultures from all parts of the earth." The nuclear family (father, mother, children) is found to be universal; within it incest taboos are universal. Rules of residence for newly married couples seem to be based on economic-geographic factors; in turn, rules of descent for the children depend on the rules of residence. Matrilocal residence tends to produce a matrilineal clan. The study finds "a 71 percent consistency between rules of residence and rules of descent, instead of the 33 percent consistency to be expected from chance." If present, the clan in its turn channelizes sex behavior, as in the generalization of the family incest taboo to the clan. Clan exogamy was found in 116 societies. Marriageability of all four kinds of first cousins tends to be equally taboo in clanless societies, while clans tend to emphasize the taboo on certain cousins. A coefficient of association of at least .70 is indicated.—L. J. Stone (Vassar).

4746. Powell, L., & Laslett, H. R. *A survey of the social development of the 10th, 11th and 12th grade pupils in a small high school.* *J. exp. Educ.*, 1941, 9, 361-363.—The Hayes Personality Rating Scale for the Adolescent in School and the Vineland Social Maturity Scale were administered to 100 pupils in the 3 upper classes in a small high school. Advantages and limitations of each of the scales are indicated and their uses as aids to the educational program discussed.—M. J. Zigler (Wellesley).

4747. Pratt, C. C. *A psychological interpretation of Schopenhauer's theory of music.* *Bull. Amer. Musicol. Soc.*, 1941, 5, 8-9.—"Music does not embody emotion, or arouse real emotion, or necessarily even suggest emotion. It weaves kaleidoscopic patterns of sound which in many instances happen to resemble the subjective patterns of real emotion. . . . *Music sounds the way emotion feels.*"—P. R. Farnsworth (Stanford).

4748. Röhmeim, G. *Die psychologische Deutung des Kulturbegriffs.* (The psychological interpretation of the concept of culture.) *Int. Z. Psychoanal. Imago*, 1941, 26, 9-31.—The development of culture in a group parallels the process of sublimation in the individual. Specific cultural areas are distinguished by the characteristics of the child's position in each; human culture as a whole, is the result of our prolonged childhood, and typical forms of human adaptation are derived from infantile situations. The synthetic function of the ego is responsible for man's conquest of nature. Though psychoanalytic interpretations of cultural elements may result from the analysis of individuals, anthropological facts should be taken into consideration as well.—H. Beaumont (Kentucky).

4749. Seashore, C. E. *Why we love music.* Philadelphia: Ditson, 1941. Pp. vi + 82. \$1.50.—This is a popular account of the author's present convictions concerning music. Each chapter is followed by a 'thought review' which is composed of a number of principles, questions, and true situations. Besides a general discussion of the whys and wherefores of our love of music, advice is given for the training of children in the preschool, the primary, and the high school. There are chapters on musical temperament and inheritance and the future of musical instruments. The book ends with an evaluative chapter.—P. R. Farnsworth (Stanford).

4750. Spears, L. L. *Sex problems solved; a semi-scientific treatise on sex and sex relations.* Denver: Wagner, 1941. Pp. 255. \$3.00.

4751. Strecker, E. A. *The man and the mob.* *Ment. Hyg.*, N. Y., 1940, 24, 529-551.—Crowd-minded mass man is possessed by a deep sense of inferiority. Compensation is imperative but insufficient, and identification with a leader results. Political isms, technology, and propaganda cannot save mass man—only education can. Democracy is defined as "an acceptance of natural inequalities and a consistent and persistent attempt to remove artificial ones."—W. L. Wilkins (Milwaukee, Wis.).

4752. Waters, R. H. *The J distribution as a measure of institutional strength.* *J. soc. Psychol.*, 1941, 13, 413-417.—There is danger of circular reasoning in relating the *J* curve distribution to institutional behavior because of the temptation to define conformity in terms of the nature of its own *J* distribution. However, the nature of the distribution of behavior may be used as an index of the strength of the institution. 3 studies using this application are cited: the behavior of motorists at a stop sign, the conformity of pedestrians to pedestrian

lanes, and the records of clothing store employees on a time clock. The behavior of the motorists and of the pedestrians did not conform to the *J* curve, indicating low potency of the enforcing agencies. The time clock study showed the *J* distribution, indicating high institutional strength.—*G. Brighthouse* (Occidental).

4753. Zeleny, L. D. Status: its measurement and control in education. *Sociometry*, 1941, 4, 193-204.—"It was a hypothesis of this study that status, defined as the average intensity of the attitudes expressed toward a person by his associates, could be measured. First, it was shown that, with the aid of the *Group Membership Record*, half units of positive and negative intensity and a zero intensity of interpersonal attitudes could be determined. Then . . . a *social status index* was computed. This *index* was shown to be both a reliable and a valid measure of status as defined. It was also hypothesized that status could be controlled. Experimental evidence was presented to show that continuous group experience accompanied by an understanding of the meaning and importance of the experience, group reassignment and counseling all appeared to make some contribution to an improved status. . . . Over a long period of time one might expect significant results. We are justified in concluding, however, that status can be measured and controlled, within the limits defined."—*L. J. Stone* (Vassar).

4754. Zilboorg, G. The paradoxical aspects of the present-day crisis. *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 216, 95-98.—A decline in national solidarity is evident in the existence of fifth columnists, appeasers, etc. There is greater hostility across class than across national boundaries. "War . . . is just the thinly veiled . . . drive to murder combined with acquisitive drives. The institution of war can serve its purpose only under the psychological condition that the nation, like a primitive family or tribe, remain united so that the ancient, fratricidal bonds between the siblings (citizens of the same state) be so thoroughly cemented that it completely inhibit the fratricidal instinct." We are in the presence of "a certain type of psychological regression . . . a shift from the patriarchal and matriarchal type of states and empires to the civilization of one of the stages of the primitive horde in which fratricide becomes psychologically possible."—*L. J. Stone* (Vassar).

[See also abstracts 4530, 4547, 4553, 4593, 4601, 4603, 4622, 4640, 4646, 4653, 4660, 4666, 4676, 4682, 4687, 4707, 4777, 4810, 4827, 4839.]

CRIME AND DELINQUENCY

4755. Carroll, H. M., & Curran, F. J. A follow-up study of three hundred court cases from the adolescent ward of Bellevue Hospital. *Ment. Hyg., N. Y.*, 1940, 24, 621-638.—Boys admitted between April 1937 and January 1938 were followed up as of July 1939. Of 119 placed on probation 68 made excellent

adjustment, but 41 were later sent to correctional institutions. Of 52 boys recommended for a correctional institution 36 made good later adjustment. 79 were recommended for a state school for mental defectives and 16 for commitment to a state hospital. At the time of follow-up 201 of the 300 were making satisfactory adjustment.—*W. L. Wilkins* (Milwaukee, Wis.).

4756. Derrick, E. H. Suicide and its prevention. *Med. J. Aust.*, 1941, 1, 668-672.—This is a study of 200 suicides coming to coroner's inquest and a plea for prompt recognition and treatment of mental disease as a means of prevention. The highest absolute incidence was between 40-49 years, but, according to age distribution of the population, it was 20-29 years. Males predominated over females 2:1. The methods in order of frequency were: firearms; drowning; hanging; falls from a height; cutting the throat; and poisons. The trivial motives often assigned emphasize the lack of psychiatric observation and care. Some cases had made previous suicidal attempts; had a history of suicide in the family; had a "nervous breakdown," an incurable organic disease, were old, or were faced with conviction for crime.—*M. E. Morse* (Baltimore, Md.).

4757. Durea, M. A. Personality characteristics and degree of delinquency: I. An empirical analysis of blameworthy circumstances and anxiety states. *J. soc. Psychol.*, 1941, 13, 329-339.—The Pressey Interest-Attitudes Test applied to 316 delinquent boys revealed that, as contrasted with less seriously delinquent boys, the most seriously delinquent boys tend to show: less expressed sensitiveness to things considered wrong; greater sensitiveness to anger and fear states; more blameworthy circumstances; more anxiety states. "Growth in a habit of wrong-doing 'immunizes' the offender against proper discrimination of social rightness and wrongness. . . . A sort of compensatory concern for insignia of normal conduct may develop as delinquency becomes worse."—*G. Brighthouse* (Occidental).

4758. Durea, M. A. Personality characteristics and degree of delinquency: II. An empirical analysis of personal interests and qualities admired in others. *J. soc. Psychol.*, 1941, 13, 341-349.—Boys with high DI's (delinquency indices) tend toward more intense reactions toward things interested in than do those with low DI's. The 2 groups do not differ significantly in kinds of people liked or admired, nor in the number of things interested in.—*G. Brighthouse* (Occidental).

4759. Exner, —. Die spätere Straffälligkeit jugendlicher Rechtsbrecher. (Later criminality among juvenile delinquents.) *Msschr. KrimBiol.*, 1940, 31, 217.—[Abstracted review; original not seen.] A follow-up study of 525 minors who had come before the Munich juvenile court during 1928 shows that 259 had been delinquent again during the succeeding decade, 100 of these more than 4 times (males, 22%; females, 3%). Offenses against property (chiefly theft) played the main role, both in the first and later delinquencies. None of the 26

sex offenders was again reported for the same cause. Half of the many cases put on probation became repeaters, 1/6 of them many times. Of the 66 sent to institutions, 73% became repeaters, 50% of them many times. This high percentage of failures does not speak well for the methods used in juvenile prisons.—*M. E. Morse* (Baltimore, Md.).

4760. Grewel, F. *Sexuele delicten van jongens in de puberteit*. (Sex delinquencies of boys during puberty.) *Mensch en Maatsch.*, 1941, 17, 191-213.—This is a study of 60 boys between the ages of 13 and 17 who had been arrested for sex delinquencies. The characteristics of the group which are discussed in this survey are: family constellation, family relations, psychopathic and neurotic tendencies of children and parents, and educational history.—*H. Beaumont* (Kentucky).

4761. Henry, G. W., & Gross, A. A. The homosexual delinquent. *Ment. Hyg.*, N. Y., 1941, 25, 420-442.—100 inmates, 78 white, were studied for age, marital status, nativity, home situations in youth, living conditions, education, occupational history. 4 case histories are detailed to throw light on the personality of the imprisoned homosexual. The group was handicapped biologically and environmentally, was forced into a world of its own by prison rules. Psychiatric study of the individual should begin in the institution and follow up after release.—*W. L. Wilkins* (Milwaukee, Wis.).

4762. Kann, R. *Criminology and aggression*. *Psychoanal. Rev.*, 1941, 28, 384-408.—Psychoanalysis has applied itself to 2 problems in criminology: the best treatment of the individual criminal and general crime-restrictive measures. Although much light has been thrown on etiology, practical uses are limited. The situation is complicated by the fact that aggression calls for punishment and punishment only increases aggression. The problem can then be reformulated thus: "In what manner can the aggressive drives of society be inhibited most effectively through criminal jurisdiction; how can an outlet be supplied if only with the subsidiary consideration of the situation, so that the greatest possible discharge of aggressions of society is connected with the smallest possible harm toward the criminal?" This can be accomplished by making some factor other than the criminal himself responsible for the crime.—*G. Brighouse* (Occidental).

4763. Kelchner, M. *Motive jugendlicher Rechtsbrecher*. (Motives of juvenile delinquents.) Berlin: Heymann, 1939. Pp. 50.—[Abstracted review; original not seen.] The chief motivations in juvenile delinquencies are: pleasure in possession; wanting to give presents; adventure; playing tricks; "acting big"; revenge; stubbornness; and passively following others. The motives are those of normal but immature young people rather than of criminals.—*M. E. Morse* (Baltimore, Md.).

4764. Krause, L. J. The correlation of adjustment and achievement in delinquent boys. *Stud. Psychol. Psychiat. Cathol. Univ. Amer.*, 1941, 5, No. 2.

Pp. xiv + 74.—The investigation was made with 100 boys in a correctional school, the control group of equal size being taken from a private grammar school; the grades were grades 6, 7, and 8. While there was no significant difference in mental age, the delinquent group was duller. Similar scholastic performance was achieved in relation to intelligence. There was no notable difference in home adjustment as determined by a modified form of the Bell inventory, although the delinquent group had a poorer school adjustment and less emotional maturity as shown by an association test. There is "little correlation between adjustment and scholastic achievement."—*H. D. Spoerl* (American International College).

4765. Lazersonas, V. [On the criminogenic significance of certain psychopathic states.] *Medicina, Kaunas*, 1941, 22, 183-193.

4766. Wollan, K. I. Treatment of juvenile delinquents. *Police J., Lond.*, 1941, 14, 305-315.—There are 3 major handicaps to the effective handling of treatment programs for the delinquent: the delinquent is not a type, treatment is begun before it is known what conditions need to be remedied, and the delinquent has been deprived of his freedom by law. The author discusses the plan of the Citizenship Training Department of the Boston Juvenile Court, which has been designed to meet these 3 difficulties. The general plan is direct, immediate treatment, based on cooperative study, which recognizes that the delinquent is a developing, essentially self-directing individual.—*G. S. Speer* (Central YMCA College).

4767. Wood, A. E., & Waite, J. B. *Crime and its treatment; social and legal aspects of criminology*. New York: American Book, 1941. Pp. ix + 742. \$3.50.—There is a conspicuous difference between the legal and scientific approaches to the problems of crime. The law is an older discipline, is more heavily weighted with tradition, and, in many cases, is in direct conflict with the empirical findings of the social sciences. The authors' text presents the problems of criminology from both points of view and attempts to indicate how advances in psychology and sociology have brought about changes in the traditional legal conceptions of crime. The first major part of the book is concerned with the scientific aspects of crime and empirical findings relating to crime and the community, the criminal, his mentality, characteristics, and background. In the next section are discussed the legal aspects of crime: the meaning, purpose, and content of the criminal law; the problem of criminal liability; the way in which evidence is gathered; and the procedures leading up to and incident upon trial. Problems of penology, the theory and practice of punishment, problems of penal institutions and extra-mural forms of corrective treatment, and parole and probation are considered in the following section. The last part is concerned with the topic of crime prevention.—*A. Chapanis* (Yale).

[See also abstract 4692.]

INDUSTRIAL AND PERSONNEL PROBLEMS

4768. Blankenship, A. B., & Whitely, P. L. Proactive inhibition in the recall of advertising material. *J. soc. Psychol.*, 1941, 13, 311-322.—Grocery store advertisements were learned by 85 male college students under 3 conditions: (1) no controlled activity preceding learning; (2) studying a similar advertisement prior to learning; (3) learning a nonsense item advertisement prior to learning of test material. Recall scores were poorest under condition 2; conditions 1 and 3 did not differ significantly from each other. "The result was taken as indicating the validity of the principle of isolation in advertising."—G. Brighouse (Occidental).
4769. Cherington, P. T., & Bergen, H. B. What do the bosses think? *Advanc. Management*, 1941, 6, 66-67.—From an analysis of the tasks for which an administration organization is responsible it is possible to construct an executive attitude questionnaire which will bring out the specific attitudes towards the various points of relationship with superiors and associates, the plan of organization and the effectiveness with which its various units are coordinated, the impartiality of executive compensation, the fairness with which junior executives are selected for promotion, the effect of executive training, and the relations between executives and unions. From one study the executive morale score averaged 77 with a range between 55 and 97, and evidence was found of dissatisfaction with executive promotion practises, with the present type of executive training, and with the part that merit played in layoffs. The judgments on 10 personnel practises are arranged in composite rank order.—H. Moore (Business Research Corporation).
4770. Fulton, J. F. Recent developments in aviation medicine. *New Engl. J. Med.*, 1941, 225, 263-268.—This review of the literature covers the past 2 years. Topical headings are: physiologic effects of acceleration, use of oxygen at high altitudes, air embolism and its prevention, and anoxia of the adrenal glands. Bibliography of 41 titles.—M. Keller (Butler Hospital).
4771. Kinberg, O. Alkohol och Trafikfarlighet. (Alcohol and traffic danger.) *Svenska L  kar. Nykterhetsf  ren. Str  skr.*, No. 12. 1940 [?].—[Abstracted review; original not seen.] The writer discusses the present arrangements in Sweden for testing of alcoholism in connection with automobile driving and arrives at the conclusion that the test of alcohol concentration in the blood is by far not sufficient. He proposes a complete psychotechnical investigation and a periodic repetition of the tests (the Danish law calls for a new test every 5 years). The physicians should have the duty of reporting any illnesses which may have an effect upon driving efficiency.—M. L. Reymert (Mooseheart Laboratory for Child Research).
4772. Knowles, A. S. Measuring salesmen's performance. *Advanc. Management*, 1941, 6, 50-57, 85.—This is a description of a merit rating plan for salesmen based on 12 types of information that should be gathered in making job specifications. From the adoption of such a plan will result the following: a better understanding of work and men, increased production, the uncovering of special abilities, the minimizing of fear and prejudice, and the establishment of fair and equitable pay. 8 factors are included in the rating form: appearance, character, intelligence, ability to get along with others, industry, initiative, efficiency, and leadership. A supplementary rating form for evaluating 7 objective factors is provided; these include: the ratio of salesmen's expenses to dollar sales volume, the ratio of sales to sales quota, and the ratio of number of separate sales to number of calls.—H. Moore (Business Research Corporation).
4773. Kogan, E. [On the methods of investigation of color sensibility in candidates for motor transport.] *Vestn. Oftal.*, 1941, 18, 431.
4774. Lee, R. H. Fatigue and hours of service of interstate truck drivers. IV: Critical fusion frequency of flicker. *Publ. Hlth Bull., Wash.*, 1941, No. 265, 195-208.—Critical frequency of flicker measurements were made on 528 truck drivers under carefully controlled conditions. Measurements were made of the dominant eye of each subject at 2 brightnesses, the wedge, with neutral filter, on the flicker machine being first set at an optical density of 4.19 (low brightness) and later at 3.25 (high brightness). The differences in the mean between groups classified by hours of driving since major sleep indicate a slight but consistent tendency toward lower critical frequency with an increasing number of hours of driving.—J. E. Zerga (U. S. Employment Service).
4775. Neece, G. W. Aviation medicine. *Kentucky med. J.*, 1941, 39, 245-248.—Aviation aptitude is a quality which does not lend itself to exact analysis. It involves both specific and general abilities, although quantitative values cannot as yet be assigned to them. The flying adaptability rating test is in reality a personality study. A candidate may be correctly passed by his home physician as normal and yet on the first aviation examination present the picture of neurocirculatory asthenia and diminished visual acuity (near tears). Such cases are rechecked on 3 successive days, after preliminary rest and quiet, but if unable to relax, they are disqualified.—M. E. Morse (Baltimore, Md.).
4776. Oldfield, R. C. The psychology of the interview. London: Methuen, 1941. Pp. xv + 144. 5s.—This book is based on data obtained by watching numerous skilled interviewers at work; by interviewing the interviewers about their methods; and by conducting interview experiments using certain special procedures. It describes the best types of procedure; the attitudes to be adopted by the interviewer; and the manner in which he may formulate his judgments afterwards. The author considers that the interview is not an interchange of stereo-

typed question and answer, followed by the formation of an equally stereotyped assessment in set terms of the nature of the candidate's personality or fitness for an occupation. It is essentially an interplay of attitudes between interviewer and candidate. The former, by manipulation of his own attitudes (of which he is usually only partly aware), stimulates the latter to react by corresponding changes of attitude. From these the interviewer is able intuitively to formulate his assessment, apparently by creating in his own mind, and then observing and judging, a kind of picture or 'schema' of the candidate's personality as a whole.—*M. D. Vernon* (Cambridge).

4777. Ruch, F. L. Effects of repeated interviews on the respondent's answers. *J. consult. Psychol.*, 1941, 5, 179-182.—Experiments reported in 3 fields of preference show that tastes are greatly influenced by familiarity. In filling out questionnaires subjects can consistently produce false and patterned responses. More research is needed in the field of evaluating the results of repeated interviewing of subjects.—*P. S. de Q. Cabot* (Simmons).

4778. Snell, A. C. Subnormal vision and occupational aptitude. *N. Y. St. J. Med.*, 1941, 41, 1165-1171.—Visual aptitude for specific jobs is not yet understood, and there are no authoritative standards. In such classifications as have been made, the groups are too few and not sufficiently specific to meet the problem of placement. Standards should be established by an authoritative medical organization in cooperation with safety engineers, labor, and management. Employers are inclined to require practically perfect vision for new employees on grounds of efficiency, accident prevention, and compensation laws (often unreasonable). This causes rejection of potentially competent employees. The determination of visual aptitude includes acuity, color vision, judgment of distance and depth, near and far vision, fusional ability, and eye dominance. In general, 20/40 acuity is the beginning of visual inefficiency, and 20/100 is the dividing line between serious inefficiency and total incapacity. Common labor is aptly performed with an acuity of 20/200; semiskilled, with 20/33-20/65; but for highly skilled industrial work a binocular minimum of 20/30 is necessary (fast moving machinery or jobs requiring quick and accurate judgment of distance).—*M. E. Morse* (Baltimore, Md.).

4779. Specht, H. Fatigue and hours of service of interstate truck drivers. V: Eye movements and related phenomena. *Publ. Hlth Bull., Wash.*, 1941, No. 265, 209-225.—The saccadic interval of 314 commercial truck drivers was measured by means of an Ophthalmograph to determine whether the length of the interval varied proportionally with the duration of the waking state and whether it changed proportionally with the change in degree of such an added factor as driving, etc. The mean saccadic intervals of men who had driven 0.1-9.9 hours and 10 hours were both significantly longer than the mean of those men who had not driven at all since

sleeping. Errors in fixation were made more frequently by men who had driven 10 hours since a major sleep than by those men who had driven less, and the ability to maintain the fastest rhythm of eye movements was poorest in those men who had driven the longest.—*J. E. Zerga* (U. S. Employment Service).

4780. Viteles, M. S. The role of industrial psychology in defending the future of America. *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 216, 156-162.—The role of industrial psychology is discussed with reference to the following problems: psychology and increased productivity; promoting individual satisfaction and industrial and social stability; scientific selection of workers; the industrial training program; elimination of unnecessary fatigue; "social situation" as a motivating factor; measurement of attitudes of workers.—*L. J. Stone* (Vassar).

4781. Young, C. A. Hypotension in aviation. *Nav. med. Bull., Wash.*, 1941, 39, 222-235.—The most important and difficult problem confronting the flight surgeon in the selection of a candidate for naval aviation is that of nervous stability or the psychic factor.—*J. E. Zerga* (Los Angeles, Calif.).

[See also abstracts 4476, 4556, 4606, 4650, 4669, 4709, 4733.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

4782. Bice, H. V., & Graves, C. E. The mentally deficient child in the residential school. *Ment. Hyg., N. Y.*, 1941, 25, 392-401.—The child's introduction to the school must be sympathetic and understanding of his learning difficulties. More research on the motivation of the mentally deficient is needed. Satisfactory social relationships are fostered by careful grouping of the institutional population according to social maturity rather than solely on the basis of IQ or age. Success of the residential school's program depends upon the contentment of the child.—*W. L. Wilkins* (Milwaukee, Wis.).

4783. Bond, E. A. The Yale-Harvard freshmen speed-reading experiment. *Sch. & Soc.*, 1941, 54, 107-111.—A survey of reading ability of Harvard freshmen in 1939-1940 showed that the upper 10% read nearly 3 times as fast as the lower 10% although similar in other abilities. A voluntary group of 40 of the slower readers given special instruction for 10 weeks showed an increase in reading rate from 215 to 335 words per minute. This was associated with apparent increase in reading comprehension. A repetition of the experiment at Yale University in 1940 gave similar results from a speed-reading course utilizing motion picture films. The increase in comprehension was 20 percentile points, although, except in a few cases, the percentage of accuracy remained unchanged. Since there is an element of speed in all existing tests of comprehension the apparent gain in comprehension is largely the result

of having time to complete the test and check the work done.—*M. Lee* (Chicago, Ill.).

4784. Bussiere, H. E., & Nemzek, C. L. The comparative scholastic achievement of NYA and non-NYA freshmen at the University of Detroit. *J. soc. Psychol.*, 1941, 13, 423-426.—Each of 174 NYA freshmen was matched with a non-NYA freshman on college, year of entrance, sex, Psychological Examination score, and chronological age. For each of 3 years the NYA students have higher honor-point averages than do the non-NYA students. The difference becomes statistically reliable when all 3 years are considered together. "There is no evidence that the NYA scholarships have had a detrimental effect upon scholastic achievement; it is possible that they have had a beneficial effect."—*G. Brighouse* (Occidental).

4785. Carrier, B. The role of mental hygiene in the college. *Ment. Hyg.*, N. Y., 1940, 24, 595-599.—A mental hygienist should decrease the necessity for individual counseling by increasing the skill with which teachers and administrators serve personality needs. A direct approach to the college adolescent's problems can also be made through 2 courses, a required orientation course for freshmen and an elective course for seniors.—*W. L. Wilkins* (Milwaukee, Wis.).

4786. Crowdson, J. Speech in an imperfectly learnt foreign language. *Brit. J. Psychol.*, 1941, 32, 82-99.—An investigation was carried out with 2 French children of 11 and 14 years to study the ways in which speech is disturbed in a foreign language. The methods used were those of reading, description, and recall, the investigation being conducted in English. Certain types of breakdown were found which resemble speech defects in aphasia: (1) tendencies to simplification, (2) tendencies for difficulties in the material to be expressed to reflect upon the articulatory processes, (3) tendencies to revert to a more primitive mode of speech reaction, and (4) tendencies to avoid abstract features of the material.—*M. D. Vernon* (Cambridge).

4787. Cutts, N. E., & Moseley, N. Practical school discipline and mental hygiene. Boston: Houghton, Mifflin, 1941. Pp. 334. \$1.90.—(*Child Developm. Abstr.*, XV: 892).

4788. Davenport, H. A. Selecting future physicians. *Quart. Bull. Northwest. Univ. med. Sch.*, 1941, 15, 133-138.—Admission to medical schools is becoming increasingly competitive. At Northwestern University college grades are the basic index for selection, as they are an index both of intelligence and of reaction to responsibility and self-improvement, and, to a considerable degree, they give the prognosis as to future achievement. The Moss medical aptitude test, taken by nearly all applicants, is a secondary criterion. It usually correlates well with the grades. A low score is a warning. A high score with low grades suggests mental ability combined with lack of persistence, and in this case the grades are the better indicator of the student's potentialities in medical school. Credentials as to

ethical conduct must be flawless, and evidence of social maladjustment may disqualify candidates. These 2 requirements reduce dishonesty, moral infractions, and alcoholism among the students to a minimum.—*M. E. Morse* (Baltimore, Md.).

4789. Desmore, A. J. B. Elements of vocational guidance; a practical handbook for teachers in South Africa. Cape Town: Maskew Miller, 1940. Pp. vi + 53. 3s.—This book outlines how the teacher can aid the student in choosing a vocation. The emphasis is on imparting occupational information and on vocational placement.—*S. G. Dulsky* (Rochester Guidance Center).

4790. Dunlop, F. S. The identification, description and development of the intellectually gifted. *Méth. sci. Educ.*, 1941, 2, 179-207.—A digest of the discussions at the Conference on the Education of the Gifted, held in honor of Leta S. Hollingworth at Columbia University in December, 1940, and an evaluation of the methods suggested for the education of the gifted child.—*H. Beaumont* (Kentucky).

4791. Flanagan, J. C. A preliminary study of the 1940 edition of the National Teachers Examinations. *Sch. & Soc.*, 1941, 54, 59-64.—Estimates on a graphic rating scale by 2 supervisors and reports by 5 students were obtained on 49 teachers in 22 school systems. There was a correlation of .51 between these and the scores of the teachers on the examinations. The items on which ratings agreed most closely with scores relate to reasoning, judgment, and education. Less close agreement concerns physical appearance, health, energy, speech, humor, congeniality, neatness, and integrity. In the sense that the examinations measure what they are designed to measure, namely a teacher's general effectiveness and desirability, they are valid, but there are other qualities which should receive special attention in a program of teacher selection.—*M. Lee* (Chicago, Ill.).

4792. Gilles, L. N., & Nemzek, C. L. The effect of part-time employment on scholastic achievement. *J. soc. Psychol.*, 1941, 13, 419-422.—250 employed boys in an intermediate school were matched for intelligence scores, curriculum, grade, and age with 250 non-employed boys. The employed group had slightly higher honor-point averages in general science, social science, health, and total honor points; the non-employed were slightly superior in English and mathematics. None of the differences was statistically significant.—*G. Brighouse* (Occidental).

4793. Graewe, H. Die Schulleistungen erbgleicher und erbverschiedener Zwillinge. (The scholastic achievements of identical and fraternal twins.) *Umschau*, 1940, 44, 264-266.—4260 school marks for 24 identical and 22 fraternal twins subjected to the same school environment were compared. Differences in school marks for monozygotic twins averaged 20%, those for dizygotic twins 48%. It is concluded that for school achievement heredity is a more important factor than environment.—*I. J. Elinson* (Adjutant General's Office).

4794. Graf, H. Die Entwicklung der Spezialklassen für Schwachbegabte in der Stadt Zürich, von 1891-1941. (The development of the special classes for feeble-minded in the city of Zurich, 1891-1941.) *Schweis. Erzieh. Rdsch.*, 1941, No. 1.

4795. Hattstrom, J. A. Visual perception's role in reading. *Optom. Wkly.*, 1941, 32, 597-600.—The writer emphasizes the fact that optometrists lack the training necessary to undertake the teaching of reading and correction of reading deficiencies. A case history is given in which reading speed was increased by tachistoscopic training, with no attempt to approach the problem from the educator's point of view. No ophthalmographic reading was made, however, before training was begun.—D. J. Shaad (Lawrence, Kansas).

4796. Jersild, A. T., Goldman, B., Jersild, C. L., & Loftus, J. J. Studies of elementary school classes in action. I. A comparative study of the daily occupations of pupils in "activity" and "non-activity" schools. *J. exp. Educ.*, 1941, 9, 295-302.—The activities of pupils in activity schools, that had adopted newer and progressive educational procedures, and control schools in the New York City elementary schools were observed throughout the day on 4 different days, distributed over a period of about 4 weeks. The present study comprises a comparison of the observations made by 4 observers, each of whom visited 3 activity classes in a given school and 3 control classes in another school. In general, control classes spend 9% more time on projects involving the class as a whole. About the same amount of time is devoted by activity and control groups to social science, but activity classes devote considerably more time than the controls to art, crafts, poetry, dramatics, and the use of the library.—M. J. Zigler (Wellesley).

4797. Jersild, A. T., Goldman, B., & Loftus, J. J. A comparative study of the worries of children in two school situations. *J. exp. Educ.*, 1941, 9, 323-326.—A Worries Inventory, comprising 13 items relating primarily to school activities and 12 items relating to out-of-school situations, was administered in 5th and 6th grades of New York City schools, 8 of which had officially adopted the activity program and 8 of which were not included in the activity program. The results show that failing a test ranks first among worries and being scolded by parents ranks second. No significant differences regarding worries were found to distinguish pupils in activity from those in non-activity schools.—M. J. Zigler (Wellesley).

4798. Jersild, A. T., Thorndike, R. L., Goldman, B., Wrightstone, J. W., & Loftus, J. J. A further comparison of pupils in "activity" and "non-activity" schools. *J. exp. Educ.*, 1941, 9, 303-309.—Tests devised by Wrightstone to measure thinking in social studies, knowledge of current affairs, social beliefs, attitudes, personality adjustment, working skills and the application of generalizations in natural sciences, etc. were given to elementary school pupils in activity and control schools who

were matched with respect to socio-economic status, school, grade, sex, and chronological age. Although the averages in 3 of the 4 tables are not significantly higher for activity pupils than for control pupils, in 1 table the critical ratios for 8 of the 12 tests are higher than 3.—M. J. Zigler (Wellesley).

4799. Klajn, H. Vaspitanje sa gledišta medicinske i socijalne psihologije. (Education from the point of view of medical and social psychology.) Belgrade: Geza Kon, 1939. Pp. 340.—[Abstracted review; original not seen.] The problems of childhood and puberty as they affect the school situation are discussed from the psychiatric and psychoanalytic points of view. Public education serves the ruling social class because its function is to adjust pupils to the social order which is dominated by that class. Punishment in school has the same purpose as legal punishment: to instill respect for authority. It should be replaced as far as possible by self-discipline.—H. Beaumont (Kentucky).

4800. Knehr, C. A. The effects of monocular vision on measures of reading efficiency and perceptual span. *J. exp. Psychol.*, 1941, 29, 133-154.—This study was designed to show whether reading time and fixation time in reading a single paragraph differ for binocular and monocular vision, and whether reading efficiency is restricted by the size of the perceptual span. Monocular reading time, fixation frequency, and regression frequency were not found to be significantly different from the binocular. Although perceptual spans for monocular vision were 10% smaller than the binocular spans, no increase in the number of fixations proportional to the decrease in perceptual span was found. Vergence movements observed in binocular eye movement records exhibit a similar form and magnitude in monocular records and are ascribed to changes in accommodation. On the whole, the results of the study are taken to indicate that reading efficiency "seems to depend to a large extent upon central rather than peripheral factors."—M. J. Zigler (Wellesley).

4801. Lark-Horovitz, B. On learning abilities of children as recorded in a drawing experiment: I. Subject matter. *J. exp. Educ.*, 1941, 9, 332-345.—404 average children (6-15 years), 3/4 of whom attended Saturday classes at the Museum, and 41 specially gifted children (12-15 years) were instructed to make a drawing on the subject of machinery (time allowance of 30 minutes), then were given a talk illustrated by 28 slides of drawings, etchings, wood and copper engravings, lithographs, paintings, pencils, charcoals, and brush and ink drawings. One week later, a second drawing was required (time allowance of 90 minutes). The second drawings of both younger and older children showed a moderate shift from the subject most favored in the first drawings (transportation: ships, trains, automobiles, airplanes) to bridge construction and, within the subject of transportation, a shift from ships to trains. The influence of the stimulus situation on the content of drawings for specially gifted children was far greater (63%) than

that for average children (194%).—*M. J. Zigler* (Wellesley).

4802. Lark-Horovitz, B. On learning abilities of children as recorded in a drawing experiment: II. Aesthetic and representational qualities. *J. exp. Educ.*, 1941, 9, 346-360.—The influence of interposing a talk illustrated by slides between 2 drawings made one week apart by 445 children between 6 and 15 years is here studied chiefly in regard to developmental status of representation. The drawings of younger children are almost entirely schematic, and this is also the case with nearly half of the older group. Second drawings reveal no significant differences in representational status. Of particular interest is a comparison between drawings of average and specially gifted children. No special is schematic, but half the averages are. Few averages attain true-to-appearance or perspective stages, while almost all specials do. However, no actual change in developmental status is noticeable in the second drawings of either group. The specials tend far more than the averages to treat machinery as an accessory in their compositional arrangement.—*M. J. Zigler* (Wellesley).

4803. Leo, F. H., & Nemzek, C. L. Relation between certain physical defects and school achievement. *J. soc. Psychol.*, 1941, 13, 385-394.—300 Detroit school children with physical defects were matched with 300 children without physical defects on intelligence, grade, curriculum, age, sex, and occupation and nationality of parents. Non-defective children had slightly better attendance records, but the difference was not statistically significant. Honor point averages averaged slightly higher for defective than non-defective boys, except in Health; none of the differences approached statistical significance. For girls the differences favored the non-defective pupils, but only the total honor point average showed a statistically significant difference.—*G. Brighthouse* (Occidental).

4804. Lowery, H. On reading music. *Dioptr. Rev. & Brit. J. physiol. Optics.*, 1940, 1, 78-88.—Reading music involves vertical as well as horizontal movements. The reader does not fix specific notes but may fixate between notes or even between staves. Different observers vary, not in the number but in the duration of fixations. Sight-reading is facilitated by familiarity with musical patterns and by highly developed eye-ear coordination. Mere eye-hand coordination results in performance devoid of musical value.—*M. R. Stoll* (American Optical Company).

4805. Nelson, M. J. Handbook of educational psychology and measurement. New York: Dryden Press, 1941. Pp. vi + 174. \$1.25.—The author hopes and believes "that this book will be particularly useful as a companion book for the beginning student in educational psychology or in tests and measurements." Part 1, summary of essentials, 72 pages, consists of 8 chapters: the human organism, motivation, learning, individual differences, human growth and development, psychology and

the "common" branches, educational measurement, and elementary statistics. Part 2, 74 pages, is a dictionary of terms used in educational psychology and statistics; part 3 is an annotated bibliography of 21 pages.—*S. G. Dulsky* (Rochester Guidance Center).

4806. Nycander, G. Om uppfostringsstraffet och karaktärsutvecklingen. (Concerning educational punishment and character development.) *Svenska Läkartidn.*, 1941, 38, 1230-1246.—The writer discusses the bearing of physical punishment on character development of children.—*M. L. Reymer* (Mooseheart Laboratory for Child Research).

4807. Parkins, G. A. The diagnosis and elimination of visual handicaps preventing efficient reading. Fall River, Mass.: Distinguished Service Foundation of Optometry, 1941. Pp. 142. \$6.00.—In addition to the standard optometric methods, 35 observational techniques and visual tests were administered to 700 school children in order to determine the relationships of various visual abilities to reading speed, reading comprehension, and scholarship. The results indicate that defective fixation is the greatest visual handicap, that visual acuity is second in importance, and that visual span is related to a less extent. Of these, fixation ability and visual span improve with training, while visual acuity is not appreciably altered by practice. Fixational defects were investigated both by observational techniques, and by the use of the ophthalmograph for permanent photographic recordings. The corrective values of various training techniques were compared, and the binocular synchronizer (a non-commercial instrument) was found to be the best rotational device. In conclusion, the author stresses the educational value that the optometrist can perform by correcting fixational defects.—*G. W. Knox* (Chicago).

4808. Patey, H. C. The teacher as a general practitioner in mental hygiene. *Ment. Hyg., N. Y.*, 1940, 24, 600-613.—The effectiveness of the teacher's activities will be enhanced by cooperative work with specialists who make intensive individual studies. Even cases which need intensive psychiatric service look to the experience of the school for therapeutic suggestions.—*W. L. Wilkins* (Milwaukee, Wis.).

4809. Schmidt, B. G. Language development as an aid to the social adjustment of mental defectives. *Ment. Hyg., N. Y.*, 1941, 25, 402-413.—This is an account of social and personal outcomes of 3 projects stressing language usage in an activity program at a lower vocational center for girls in Chicago with IQ's of 38-72 and CA's of 12-16.—*W. L. Wilkins* (Milwaukee, Wis.).

4810. Schroeder, T. Really new education for social living. *Psychoanal. Rev.*, 1941, 28, 363-371.—"Everywhere 'education' is subordinated to religious-moralistic sentimentalism, and therefore to the psychological imperatives which make for the perpetuation of infantile impulses and intellectual methods. These imperatives include the religious

temperament and its anti-scientific method for promoting social progress; and for the promulgation and glorification of the morally approved emotional and ideological symptoms of the 'split personality'." Thus we have a maximum of predisposition for discord. The new education must be amoral, must accelerate the natural processes of mental maturing, and must make it possible for the student to do ever more objectively realistic thinking.—G. Brighouse (Occidental).

4811. Segel, D. Measurement of aptitudes in specific fields. *Rev. educ. Res.*, 1941, 11, 42-56.—This article reviews the literature for the period from January, 1938 to July, 1940 under the following headings: general treatises of vocational aptitude, aptitude for specific academic fields, musical ability, art aptitude, visual acuity and auditory testing, mechanical and manual dexterity tests, manual semi-skilled and skilled trades, clinical aptitudes, professional and semi-professional pursuits, miscellaneous. There are 123 titles in the bibliography.—M. Keller (Butler Hospital).

4812. Sells, S. B., Loftus, J. J., & Herbert, L. Evaluative studies of the activity program in the New York City public schools: a preliminary report. *J. exp. Educ.*, 1941, 9, 310-322.—Test performances of pupils in 9 elementary schools in New York City in which the official activity program has been conducted are compared with those of pupils in 9 regular elementary schools selected as controls. For a majority of the tests employed the median scores of the pupils in activity schools exceeded somewhat those for pupils in regular schools.—M. J. Zigler (Wellesley).

4813. Sisson, E. D. Vocational choices of students from cities, towns and farms. *Sch. & Soc.*, 1941, 54, 94-96.—From a questionnaire filled out at registration by all freshmen at the Louisiana State University the vocational choices of students reporting that they came from cities, towns, or farms were compared. Of the city boys 41.85% chose engineering, 11.01% business and commerce, and 6.61% agriculture; of the farm boys the percentages choosing these fields were 22%, 3%, and 36.50% respectively. 22.51% of the city girls chose teaching, 22.17% commerce and secretarial work, and 7.69% journalism as contrasted with 46.30%, 7.41%, and 3.70% of farm girls making these choices. The town group is not so clearly differentiated but leads slightly in its preference for careers in music, drama, medicine, and law. There are fewer students who have made a vocational choice in the farm than in the city group. After a year in college the allocation of the groups in different colleges shows some modification of the differences. Though still nearly 1/3 of the farm group are enrolled in agriculture and more than 1/3 of the others in arts and science, 26% of the farm group had changed their vocational plans as against 18.53% of the city group and 20.37% of the town group.—M. Lee (Chicago, Ill.).

4814. Sterba, E. The school and child guidance. *Psychoanal. Quart.*, 1941, 10, 445-467.—Many of

the problems confronting teachers center around a child's failure of adjustment carried over into the classroom. The author presents in detail such a problem solved by the teacher and a child analyst working in cooperation. The course of clinical events, the role of the teacher, the significances of the child's neurotic behavior, the measures by which the child was enabled to make a good adjustment, and the importance of cooperation between teacher and child analyst are discussed in detail and illustrated with case history material.—M. H. Erickson (Eloise Hospital).

4815. Watson, M. E. Mental hygiene and the student. *Ment. Hyg.*, N. Y., 1940, 24, 614-620.—Deans of women need months of clinical experience under an expert psychiatrist, working with the problems of adolescents, and they should be well-adjusted personalities.—W. L. Wilkins (Milwaukee, Wis.).

4816. Wrenn, C. G., Humber, W. J., & McKewon, R. B. Study habits inventory. (Rev. ed.) Stanford University: Stanford Univ. Press, 1941. Pp. 3. 25 copies, \$1.25; 100 copies, \$3.50.—In this revision of the 1935 edition another student population was used to further validate the test items. 71 statements concerning study habits and attitudes were submitted to a group of University of Minnesota students. These students had been equated on the basis of the ACE Psychological Examination, sex, major department, and length of time in college, but were unequal in scholarship. 4/5 of the items on the original inventory showed significant differences between high- and low-achievement groups and were retained in the revised form. 4 further items showing significant differences were included, making a total of 28 items for the new edition. Fewer items differentiated among women than among men.—W. F. Madden (Middlebury).

4817. Wrenn, C. G., & Larsen, R. P. Studying effectively. (Rev. ed.) Stanford University: Stanford Univ. Press, 1941. Pp. 33. 25¢.—This manual of study aids is written for the student to help him discover his study weaknesses and improve his study methods. After taking the Study Habits Inventory (see XV: 4816), representing the first part of the booklet, and correcting the test, the student analyzes those questions where a negative score was achieved indicating a habit which is associated with poor academic achievement. Each statement of the inventory has a page reference indicating where it is discussed in the second part of the booklet. The third section contains another copy of the inventory for retest to afford the student an opportunity to check his progress. Selected references for further study are given with a list of study problems and topics and indications of where in the references discussions of the topics will be found.—W. F. Madden (Middlebury).

4818. Yerbury, E. C. How the state division of mental hygiene can be of service to the local schools. *Ment. Hyg.*, N. Y., 1941, 25, 450-457.—30 child guidance clinics in Massachusetts treat children up

to age 14 referred by schools. Social worker, psychologist, and psychiatrist cooperate in diagnosis. Direct therapy is carried on by the psychiatrist and indirect by the social worker. Clinics for adults and conferences on children's problems are carried on.—*W. L. Wilkins* (Milwaukee, Wis.).

4819. Zachry, C. B. The influence of psychoanalysis in education. *Psychoanal. Quart.*, 1941, 10, 431-444.—A general discussion is given of the present educational system, of the gradual development of the progressive educational movement and the difficulties this movement encounters, and of the significant role being played in the development of educational methods by the replacement of a rigid restrictive formalism by a freer and more intimate atmosphere. A particularly significant part has been played in this development by the indirect introduction of psychoanalytic concepts and principles which have served in large part to further the recognition of the individual as a social unit, the significance of motivation, the importance of unconscious forces, and the need to utilize intelligence tests and similar services. Much is to be accomplished by utilization of psychiatric and related services in the development of the educational program.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 4486, 4527, 4711, 4741, 4746, 4764, 4833.]

MENTAL TESTS

4820. Stroud, J. B. Applications of intelligence tests. *Rev. educ. Res.*, 1941, 11, 25-41.—This is a review article covering the period from January, 1938 to July, 1940. Topical headings are as follows: racial factors in intelligence; family factors; birth factors; socio-economic status; personality, behavior, and intelligence; constancy of mental test performance; effect of environmental factors; intelligence test performance and academic achievement; prediction of school success; relations between test intelligence and various factors; physiological correlates of intelligence; the deaf and hard of hearing. The bibliography lists 114 titles.—*M. Keller* (Butler Hospital).

4821. Stuit, D. B. Current construction and evaluation of intelligence tests. *Rev. educ. Res.*, 1941, 11, 9-24.—This is a review of the literature from January, 1938 to July, 1940 presented under the following headings:—individual intelligence tests (verbal): new and revised tests, evaluation of Stanford Binet tests, interpreting patterns and variability in scores, clinical evaluation, other studies and evaluations; group intelligence tests (verbal): new and revised tests, evaluations of group tests; performance tests: new and revised tests, studies and discussion of performance tests; measures of particular mental abilities. There are 82 titles in the bibliography.—*M. Keller* (Butler Hospital).

4822. Traxler, A. E. Psychological tests and their uses: brief overview of the period. *Rev. educ. Res.*, 1941, 11, 5-8.—This is a brief review of the literature from January, 1938 to July, 1940 on recent trends

in psychological measurement. The bibliography includes 10 titles.—*M. Keller* (Butler Hospital).

[See also abstracts 4486, 4667, 4836.]

CHILDHOOD AND ADOLESCENCE

4823. Alpert, A. Education as therapy. *Psychoanal. Quart.*, 1941, 10, 468-474.—In 1935, under the direction of the author, educational group therapy, utilizing group discussion, was used successfully to treat thumb-sucking in children in a pre-kindergarten. Report is now given of a successful repetition of that experiment by the treatment of a similar group for the persistent symptom of an exaggerated use of scatological language. A detailed account of the group discussion procedure is given. The author concludes that educational group therapy is possible in public as well as private schools and that it constitutes only a periodic intensification of an intelligent educational program as it should be conducted from day to day.—*M. H. Erickson* (Eloise Hospital).

4824. Anthony, S. The child's discovery of death. New York: London: Harcourt, Brace; Kegan Paul, 1940. Pp. xvi + 231. \$3.50.—This book contains a large amount of data on children's ideas and phantasies about death, obtained from records of children's ordinary conversations, stories completed from set themes, and answers to certain of the questions in the Terman-Merrill revision of the Binet test. The idea of death occurs quite readily to children aged 5-6 and upwards; therefore, for adults to try and shield them from all thought of death, is quite unnecessary. The phantasies about death show that it is not always thought of in connection with hostility and aggression, although this frequently occurs, but that it may appear as the opposite polarity to birth and hence be associated with rebirth. When feelings of anxiety and guilt have been aroused by the death of somebody closely associated with the child, these fears may be allayed by free and open discussion of the subject, couched in objective terms; the child often at such a time tends to repress his guilt phantasies. Extensive bibliography.—*M. D. Vernon* (Cambridge).

4825. Baruch, D. W. Doll play in pre-school as an aid in understanding the child. *Ment. Hyg.*, N. Y., 1940, 24, 566-577.—Play situations in which dolls represented members of the family to preschool children revealed their feelings and yielded clues useful to understanding the emotional needs of the children.—*W. L. Wilkins* (Milwaukee, Wis.).

4826. Birkmayer, W., & Goll, H. Über die Entwicklung des Gehens. I. Mitteilung. (The development of walking. First communication.) *Dtsch. Z. Nervenheilk.*, 1940, 151, 237-253.—The development of walking was analyzed in children of different ages by the film method. In beginners the different phases are very irregular and jerky, and the static principle predominates. The duration of the standing phase is long, the surface of support large, and the center of gravity falls within it. The head and trunk are thrust forward and form the

driving mass. The hands are pressed to the sides. Standing upright is more difficult than forward progression, several forms of which the child has already learned. As development proceeds, the duration of the stepping phase, length of step, and step index increase. The surface of support decreases relatively, and in several phases the center of gravity falls rhythmically outside it. The static regulation of the child thus passes into the swinging, flexible dynamic gait of the adult. The exact manner and time of this change will be discussed later.—*M. E. Morse* (Baltimore, Md.).

4827. **Britt, S. H., & Janus, S. Q.** Toward a social psychology of human play. *J. soc. Psychol.*, 1941, 13, 351-384.—Theories of play are reviewed and classified as biological, psychobiological, psychological, sociological, or clinical. The empirical studies of play are reviewed in terms of method: observational, questionnaire, play quiz, experimental, and clinical. The findings of these studies are summarized with respect to age and maturation; sex; environment; toys and manipulation of the play situation; and intelligence and special abilities. Tentative conclusions are drawn and suggestions given for further investigations.—*G. Brighouse* (Occidental).

4828. **Bruch, H.** Obesity in childhood and personality development. *Amer. J. Orthopsychiat.*, 1941, 11, 467-475.—From a study of obese children the author concludes that this obesity in childhood may be understood as a disturbance in the maturation of the total personality and as a somatic compensation for thwarted creative drives, whereby the total size of the body becomes the expressive organ of the conflict. Neither mechanical reduction of food intake nor endocrine therapy are usually indicated. To be successful, therapy should help the child grow independent and self-reliant and make constructive use of his good physical and mental endowment, so that he can find more dynamic outlets for his creative drives than the static form of physical largeness.—*R. E. Perl* (Jewish Board of Guardians).

4829. **Champney, H.** The measurement of parent behavior. *Child Developm.*, 1941, 12, 131-166.—This paper consists of a description and presentation of the Fels Parent-Behavior Rating Scales and is prefaced by a discussion of the rationale which lies behind the final product. The battery of scales "is presented for the use of the home visitor in appraising the child's environment in terms of 30 variables of parent behavior." 25 references.—*C. N. Cofer* (George Washington).

4830. **Conn, J. H., & Kanner, L.** Spontaneous erections in early childhood. *J. Pediat.*, 1940, 16, 337-340.—(*Child Developm. Abstr.* XV: 545).

4831. **Dennis, W.** The significance of feral man. *Amer. J. Psychol.*, 1941, 54, 425-432.—The author reviews some of the material respecting children purporting to have lived with animals and summarizes some of the difficulties that must be surmounted before there is scientifically valid evidence

that they actually did so live. In particular he cites some of the data respecting their intelligence. "In view of our ignorance concerning the history of alleged isolated children I suggest that these cases not be cited as evidence for any social or psychological theory. We know that there are idiots and imbeciles. We know that alleged feral man has similar characteristics. Until we have better evidence it seems best to reserve judgment as to whether or not 'feral' children were idiotic or imbecilic before they became 'feral'."—*D. E. Johannsen* (Skidmore).

4832. **Diserens, C. M.** Parental acceptance and rejection and their influence on the child's behavior. *Méth. sci. Educ.*, 1941, 2, 131-151.—Except in cases of physical abnormality or mental abnormality of an organic nature, behavior problems are the result of maladjusted parents. Acceptance can be achieved only when the parent is guided by the child's needs rather than his own. In the opposite case, his surrounding conditions predispose the child to fears, inhibitions, inferiority feelings, and poor social adjustment. A program of parent education should not be purely scientific in giving the parents an understanding of their own motives as well as of the motivation of their children but should include a philosophy of values. The priest and the moral philosopher should collaborate with the psychologist, sociologist, and mental hygienist and supply the spiritual wisdom without which scientific prescriptions are likely to remain inert.—*H. Beaumont* (Kentucky).

4833. **Driscoll, G.** How to study the behavior of children. New York: Bureau of Publications, Teachers College, Columbia University, 1941. Pp. viii + 84. \$0.60.—This monograph will assist teachers in understanding the practical problems of child behavior which arise in their classrooms. Chapter 1 discusses the opportunities for studying children's behavior in the classroom, on the playground, in out-of-school activities, and from contact with parents. Chapter 2 presents methods used in gaining greater understanding of behavior. Clues for determining physical, mental, social, and emotional development are listed, and the personal-social relationships of the classroom discussed. Chapter 3 offers suggestions about how to utilize the knowledge gained for the guidance of individual children.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

4834. **Erickson, M. H.** On the possible occurrence of a dream in an eight-month-old infant. *Psychoanal. Quart.*, 1941, 10, 382-384.—An item of sleeping behavior in an 8 month old infant suggestive of a dream is described. Repetition of this same type of behavior was observed at 13 months. A definite dream with affective and ideational content was secured at 23 months.—*M. H. Erickson* (Eloise Hospital).

4835. **Fortanier, A. H.** Neurosen in de puberteit. (Neuroses in puberty.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 946 ff.—[Abstracted review;

original not seen.] This is a review of the literature on neuroses in puberty. Non-analytic sources usually present a static classification of syndromes, while psychoanalytic authors stress the dynamic aspects.—*H. Beaumont* (Kentucky).

4836. Gesell, A., & Amatruda, C. S. *Developmental diagnosis; normal and abnormal child development*. New York: Hoeber, 1941. Pp. xiii + 447. \$6.50.—The research of the Yale Clinic, reported as such elsewhere, is here organized for the benefit of pediatricians and general physicians, with a consistent emphasis on diagnosis rather than theory. This plan is aided, particularly in the normative sections, by numerous charts, tables, and tracings of motion-picture records. Part 1 presents principles of growth, methods of study and examination, and, in integration, "the developmental tests, the behavior characteristics, and the growth trends of the behavior patterns for the period from 4 weeks to 3 years." Part 2 is devoted to the developmental indications of amentia and other defects and deviations, such as endocrine disorders; it includes a section on infant neurology. Part 3 deals with the protection of development in early childhood through private and public health measures. "The Appendix is virtually a condensed manual of directions for the various developmental test procedures and for the setting up of examination arrangements." A final section discusses the use of behavior films in the study of normal and abnormal growth in young children.—*L. J. Stone* (Vassar).

4837. Grotjahn, M. A child talks about pictures; observations about the integration of fantasy into the process of thinking. *Psychoanal. Quart.*, 1941, 10, 385-394.—In an informal observational situation, covering the age period of 3-5½ years, a child's reactions to pictures and the progressive integration of his fantasies into a process of thinking are reported in detail with many illustrative instances. An 11-item bibliography is appended.—*M. H. Erickson* (Eloise Hospital).

4838. Howard, E. M. An analysis of adolescent adjustment problems. *Ment. Hyg., N. Y.*, 1941, 25, 363-391.—117 college women students, 21 with neuroses, 5 with psychoses (all of whom dropped out of college), 17 with immature personality development, 20 with non-psychiatric problems, and 54 with adolescent difficulties, were studied. Analysis of the 54 cases leads to a classification of adolescent problems: (1) conflict over augmentation or continuation of unsolved family ties; (2) anxiety or adolescent guilt or depression; (3) problems representing attempts at solution of the conflict between instinctual drives and social demands, including rebellion against social restrictions and such recoiling from instinctual demands as adolescent asceticism and intellectualism, masculine identification as a means of avoiding hetero-sexual conflicts, or reversion to the security of earlier family ties.—*W. L. Wilkins* (Milwaukee, Wis.).

4839. Kanner, L. Cultural implications of children's behavior problems. *Ment. Hyg., N. Y.*,

1941, 25, 353-362.—Difficulties in child-rearing spring from autocratic, uncompromising, fear-ridden methods. Many problems could be remedied and precluded by compromise, respect for the individual of every age, and belief in the essential goodness and decency of man.—*W. L. Wilkins* (Milwaukee, Wis.).

4840. Kempf, J. G. *Helping youth to grow*. Milwaukee: Bruce, 1941. Pp. ix + 204. \$2.00.—(*Child Develpm. Abstr.* XV: 900).

4841. Kiefer, F. J. *The child and you*. Milwaukee: Bruce, 1941. Pp. x + 150. \$2.00.—(*Child Develpm. Abstr.* XV: 901).

4842. Kruse, H. *Zum Problem der Kindesmiss-handlung*. (The problem of mistreatment of children.) *Mschr. KrimBiol.*, 1940, 31, 30 ff.—[Abstracted review; original not seen.] A comprehensive review of some of the literature is presented. The Berlin Society for Protection of Children from Exploitation and Abuse finds that 90% of the ill-treatment occurs within the family and that 68% of the cases are illegitimate or stepchildren. The children are often mentally abnormal; the psychology of the abused child and his parents is only one of the many problems in a degenerate family. Ill-treatment in childhood is of profound importance for the later fate of the child. Authors quoted are: v. Levetzow, Leppmann, Bergemann, Hagenau, Hetzer, and Villinger.—*M. E. Morse* (Baltimore, Md.).

4843. LaMar, N. C., Weinfeld, G. F., Spock, B., & Mohr, G. J. *Pediatrics and child psychiatry: a symposium*. *Amer. J. Orthopsychiat.*, 1941, 11, 423-452.—Weinfeld presented a paper on pediatric training approaches in infancy, discussing especially the questions pertaining to feeding and toilet training. Spock confined himself to the problems of the school child as encountered by the pediatrician, starting with the choice of a nursery school and continuing up to the problems of adolescence. Mohr presented some treatment indications, reviewing some characteristic clinical situations encountered by the pediatrician, or in the child guidance clinic, or by the child psychiatrist. The discussants were Hushka, Wile, Langford, and Wickman.—*R. E. Perl* (Jewish Board of Guardians).

4844. Lamb, W. F. Some behavior problems in infancy and early childhood. *Kentucky med. J.*, 1940, 38, 485-488.—Most child problems are created by inconsistent treatment, overprotection, and conditions resulting from poverty. Temper tantrums should receive no excessive attention. Less emphasis on feeding will often put a stop to the meal-time scene. The child should not be shamed for his fears but should be encouraged to discuss them. Lying may occur as a defense from the humiliation of confession and punishment, because of jealousy of members of the family, or as a verbalization of the make-believe world.—*D. Miller* (U. S. Employment Service).

4845. Laroche, G. [Ed.] *La puberté: étude clinique et physiopathologique*. (Puberty: a clinical

and physiopathological study.) Paris: Masson, 1938. Pp. 346.—[Abstracted review; original not seen.] This book contains 20 articles by as many well known French physicians. It deals primarily with the endocrinological aspects of sexual development and orientation in relationship to the growing personality. Mention is made of the importance of the problem in relation to education.—*M. H. Erickson* (Eloise Hospital).

4846. Lurie, O. R. Psychological factors associated with eating difficulties. *Amer. J. Orthopsychiat.*, 1941, 11, 452-467.—From a study of 25 cases with eating difficulties the author concludes that eating behavior can only be understood in relation to the child's whole pattern of adjustment. Refusing to eat may be a form of revenge for maternal deprivation. It may be that by refusing to eat without special attention the child compels the mother to acknowledge his dependence. Refusing to eat may also serve as punishment to the child himself. The characteristic domestic situation involves domestic discord: the mother immature but dominating, the father ineffectual and undependable. In most cases the child was unplanned for and unwanted.—*R. E. Perl* (Jewish Board of Guardians).

4847. Lyon, R. A., Rauh, L. W., & Carroll, M. G. The social adjustment of children with heart disease. *Ment. Hyg., N. Y.*, 1941, 25, 443-449.—Of 18 children with rheumatic heart disease and 4 with congenital heart lesions, ranging in age to 14 when first seen, 13 had normal, 6 low normal, and 3 definitely retarded intelligence. Only 3 of the children were timid; school achievement was better than might be expected; occupational ambitions were not affected. Social adjustment depends upon the attitude of the patient and the parents and upon the way in which the parents react to the physician's attitude.—*W. L. Wilkins* (Milwaukee, Wis.).

4848. Polier, J. W. Everyone's children, nobody's child. New York: Scribner, 1941. Pp. 331. \$2.75.—(*Child Developm. Abstr.* XV: 905).

4849. Rascovsky, A., Salzman, J., & others. [Study of environmental factors in the adiposogenital syndrome in boys.] *Arch. argent. Pediat.*, 1941, 14, 521 ff.—[Abstracted review; original not seen.] In a study of the prepubertal adiposogenital syndrome in 100 boys investigations were made in relationship to the environment, genealogy, psychological status, Rorschach and other mental test findings, general physical status, and selected x-ray, anthropometric, phoniatric, ophthalmologic, and laboratory tests. With only one exception, each boy was an only, an eldest, or a youngest son. A high degree of family fixation existed. Sexuality was hyperstimulated but frustrated, oral and anal fixations were predominant, and genitality was repressed. Parental personalities and the interrelationships within the family tended to be psychopathological.—*M. H. Erickson* (Eloise Hospital).

4850. Reeves, K. Who goes to nursery school? *Ment. Hyg., N. Y.*, 1941, 25, 458-461.—Adjustment

to nursery school depends upon parental attitudes.—*W. L. Wilkins* (Milwaukee, Wis.).

4851. Sterba, E. An important factor in eating disturbances of childhood. *Psychoanal. Quart.*, 1941, 10, 365-372.—Most important of neurotic disturbances in children of an early age are eating problems. Since these antedate the genital phase, they might be regarded as only oral in origin, but analysis discloses a displacement of instinctual quantities from other erogenous zones to the oral in the pregenital phase of development. Material from 2 illustrative cases is cited.—*M. H. Erickson* (Eloise Hospital).

4852. Sterren, H. A. v. d. "Moeilijke" kinderen en Rorschachs psychodiagnosiek. ("Difficult" children and Rorschach's psychodiagnosis.) *Psychiat. neurol. Bl., Amst.*, 1938, 42, 416 ff.—[Abstracted review; original not seen.] The author cites 5 cases in which the diagnostic picture resulting from the Rorschach test coincides closely with that produced by psychoanalytic techniques. The Rorschach test should not be used nor evaluated by laymen without psychiatric and analytic training.—*H. Beaumont* (Kentucky).

4853. Vaynbaum, S. I. [Treatment and cause of nocturnal enuresis in children.] *Sovetsk. Med.*, 1940, 2, 32 ff.—(*Child Developm. Abstr.* XV: 772).

4854. Whiles, W. H. Treatment of emotional problems in childhood. *J. ment. Sci.*, 1941, 87, 359-369.—The need for psychological study of the child's emotional problems is discussed and diagnosis and treatment through play advised.—*W. L. Wilkins* (Milwaukee, Wis.).

4855. Williams, C. T. Some facts about premature infants. *New Orleans med. surg. J.*, 1940, 93, 244 ff.—(*Child Developm. Abstr.* XV: 533).

4856. Woodcock, L. P. Life and ways of the two-year-old; a teachers study. New York: Dutton, 1941. Pp. 267. \$2.00.—(*Child Developm. Abstr.* XV: 916).

4857. Wrenn, C. G., & Harley, D. L. Time on their hands; a report on leisure, recreation, and young people. Washington, D. C.: American Council on Education, 1941. Pp. xxi + 267. \$2.00.—The authors review the recreational needs and status of youth in relation to modern social changes. The primary emphasis is on the group aged 16-25, but the needs of children and adults, and of special groups, such as Negro youth and rural youth, are also recognized. The general approach is indicated by the chapter headings: recreation needs of youth, need for guidance in cultural recreation, recreation in the modern world, recreation through publicly supported community agencies, recreation through privately supported community agencies, community planning for the recreation needs of youth, state recreation functions and agencies, federal recreation functions and agencies, major objectives and recommendations for recreation planning. The final chapter contains detailed recommendations for implementing the basic viewpoint: that recrea-

tional planning should be in terms of the needs of youth rather than the structure of existing agencies; that there is a need for coordination of existing agencies to effect the greatest possible use of their facilities; and that there is an urgent need for broad-scale planning by community, state, and national governments.—G. S. Speer (Central YMCA College).

4858. Yellowlees, H. The problem of adolescence. I. *Lancet*, 1940, 238, 233-235.—"Trouble at adolescence rarely comes out of the blue. It is, as a rule, the strongest possible evidence that the mischief has been done, that previous danger signals have been ignored."—C. K. Trueblood (Cambridge, Mass.).

4859. Yellowlees, H. The problem of adolescence. II. *Lancet*, 1940, 238, 279-282.—The signs of a healthy adolescence are: (1) the desire for knowledge, (2) the questioning of authority, (3) the realization of sex, and (4) the realization of the need for work. Whether or not these traits of attitude and outlook develop to the degree of becoming recognizable in adolescence depends on the policies of the parents during the infancy and childhood of the child.—C. K. Trueblood (Cambridge, Mass.).

4860. Yellowlees, H. The problem of adolescence. III. *Lancet*, 1940, 238, 326-329.—Policies of parents are sometimes such that the child remains infantile in outlook and clings to his childhood Garden of Eden, notwithstanding his steadily proceeding growth into physical adulthood. He is "soon well out on the road, and moving further from the garden gates every day, but with his gaze so fixed upon the place whence he came out, that for all practical purposes he is walking backwards." We can approach the adolescent and "invite him to lean upon us, assuring him that while he leans we will sweep the road clear, and help him stagger along it backwards." Some psychotherapy is of this sort. On the other hand, the physician can approach his adolescent patient, determined that their united efforts shall turn the patient on his own axis through an angle of 180°. In this turning round process, "an essential part of all satisfactory treatment," the physician must approach the patient, "not only with the methods of science, but in the

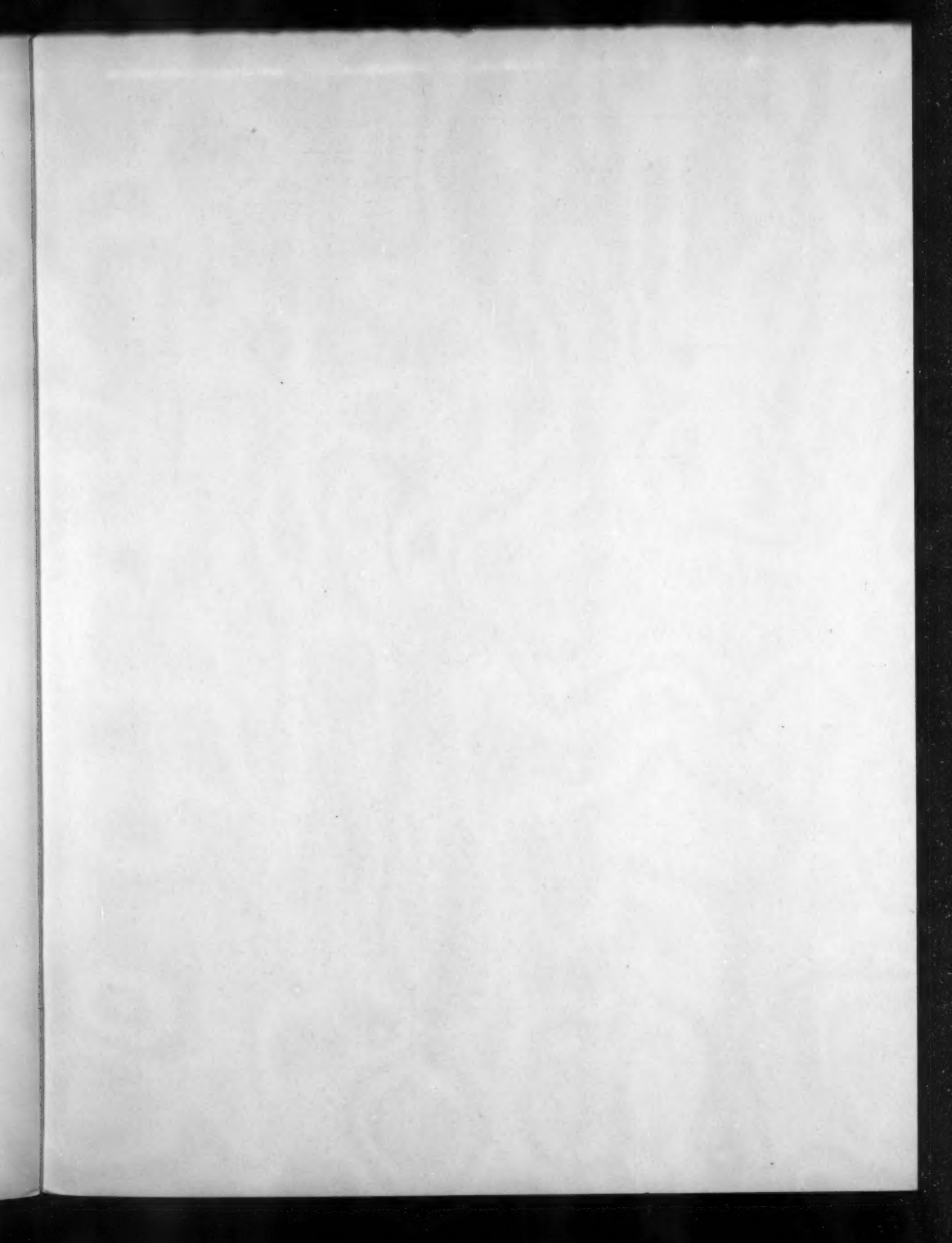
spirit and language of human comradeship and understanding, with which science has nothing to do."—C. K. Trueblood (Cambridge, Mass.).

4861. Yellowlees, H. The problem of adolescence. IV. *Lancet*, 1940, 238, 371-374.—The author devotes his concluding lecture to the problems of the physician who is finally called in to deal with adolescent problems. "Amazing results can be and are achieved by a man whose knowledge of technical psychology may be limited. . . . He must . . . perceive the necessity of the 'turning round processes' . . . and must realize that the patient, through no fault of his own, rarely has any great wish at the beginning to be turned round. . . . If he did the problem would never have arisen." The physician must realize that most of these patients have an unhappy home life, whether they realize it or not, and must be man enough to tell the truth as he sees it to the parents.—C. K. Trueblood (Cambridge, Mass.).

4862. Zeller, W. Entwicklung und Körperform der Knaben und Mädchen von vierzehn Jahren. (Development and body form of 14 year old boys and girls.) Berlin: R. Schoetz, 1939. Pp. 102. RM 4.80.—[Abstracted review; original not seen:] In addition to the usual criteria of age and physical development, the author considers the maturation of the primary and secondary sexual characteristics as indices of pubertal development and body form. Developmental norms are established. The data was obtained from 780 subjects 13½-14½ years of age.—G. F. J. Lehner (Miami).

4863. Zingg, R. M. A reply to Professor Dennis. *Amer. J. Psychol.*, 1941, 54, 432-435.—Dennis (see XV: 4831) errs in stating that "not a single account has been written of the fact that the child was captured in an animal den or in close company with an animal." The evidence concerning the Midnapore children is sufficiently substantiated to be accepted; the question of the children's original intelligence is not discussed.—D. E. Johannsen (Skidmore).

[See also abstracts 4636, 4638, 4642, 4645, 4693, 4700, 4717, 4718, 4726, 4755, 4759, 4760, 4763, 4764, 4766, 4782, 4797, 4814, 4818.]



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